Issue 172
PS
1967 Series
THE PREVENTIVE MAINTENANCE MONTHLY
THAT'S THE SECOND UNAUTHORIZED "IMPROVEMENT" GEORGE HAS MADE THIS MONTH!
Will Eisner
WITH FRIENDS LIKE THESE WHO NEEDS ENEMIES?
SEE PAGE 29

HELP
HELP
HELP
HALP
HALP
OOH!
HELP
HELP
HALP!!
GASP
CHOKE
HELP
HELP
HELP
HELP
HELP
SOLDIER, KEEP OUR OIL FILTERS CLEAN
OUR ENGINES ARE BEING CHOKED AND STARVED BY DIRTY FILTERS!
SOLDIER, KEEP OUR AIR FILTERS CLEAN
HELP
GLAK

QUICK BEFORE IT'S TOO LATE... CLEAN OR REPLACE YOUR ENGINE'S FILTER ELEMENT NOW!

PS

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THE **PREVENTIVE MAINTENANCE** MONTHLY

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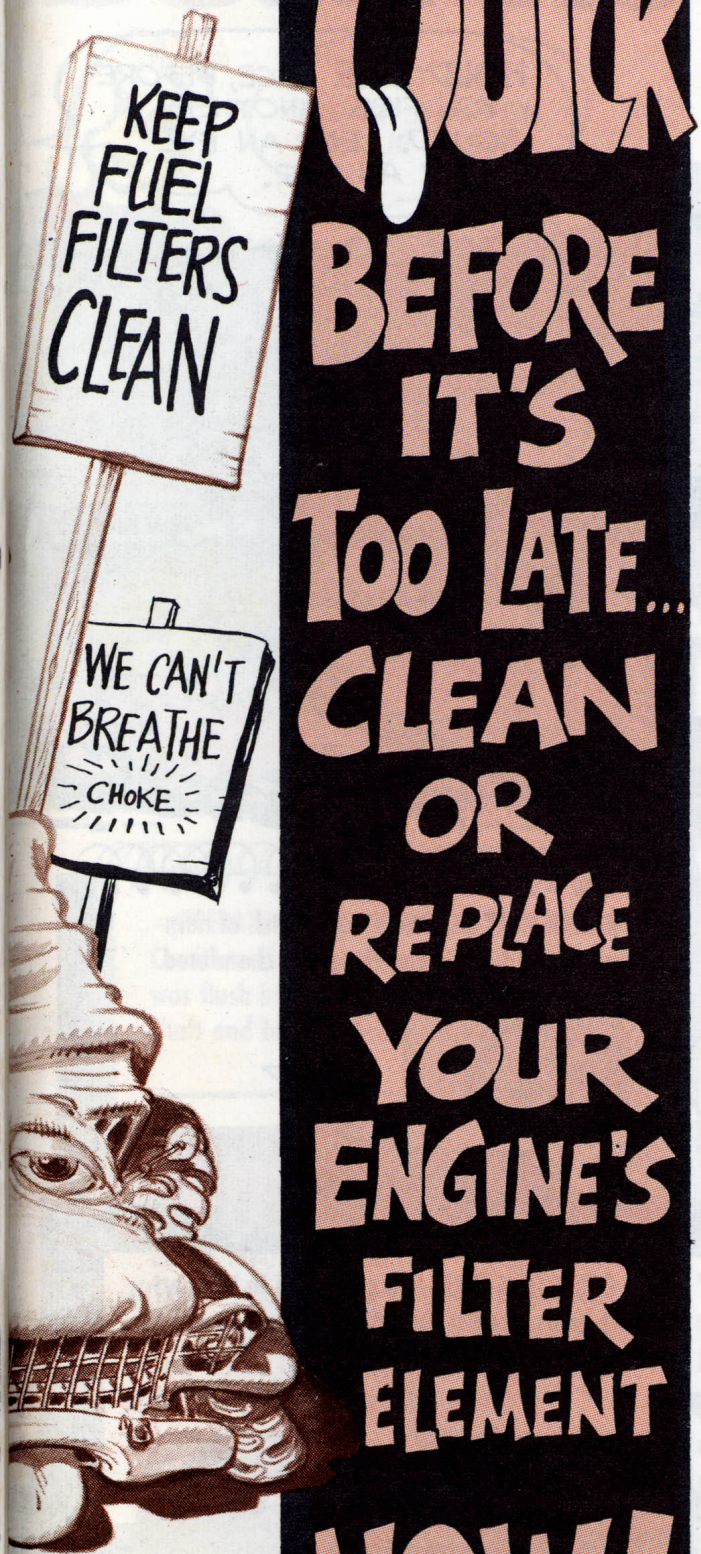
40121



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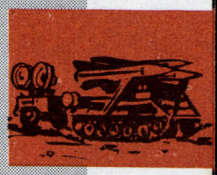

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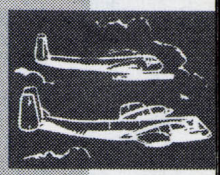

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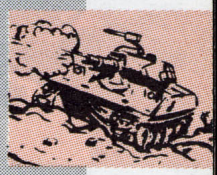

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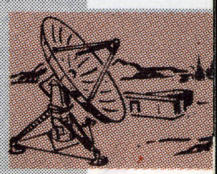

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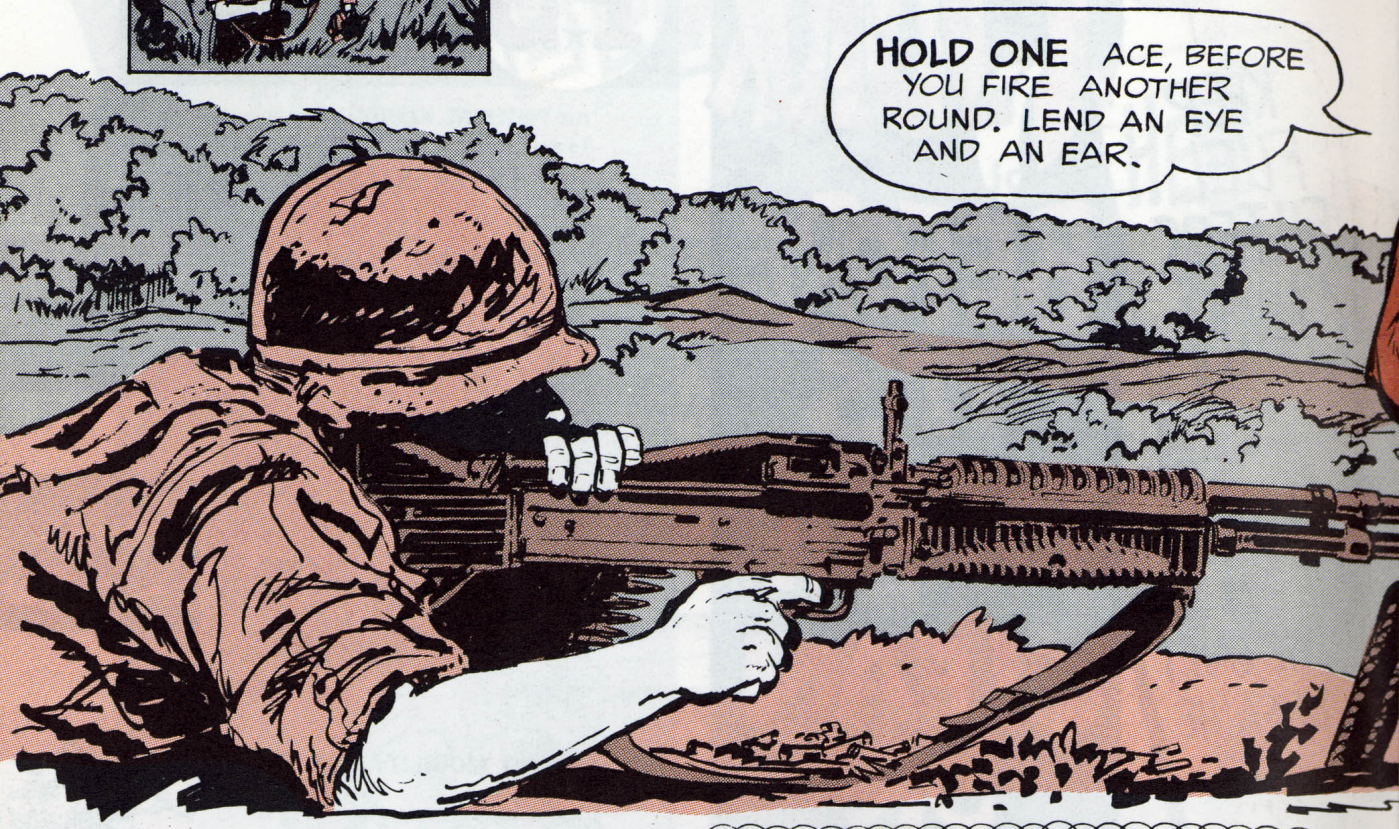
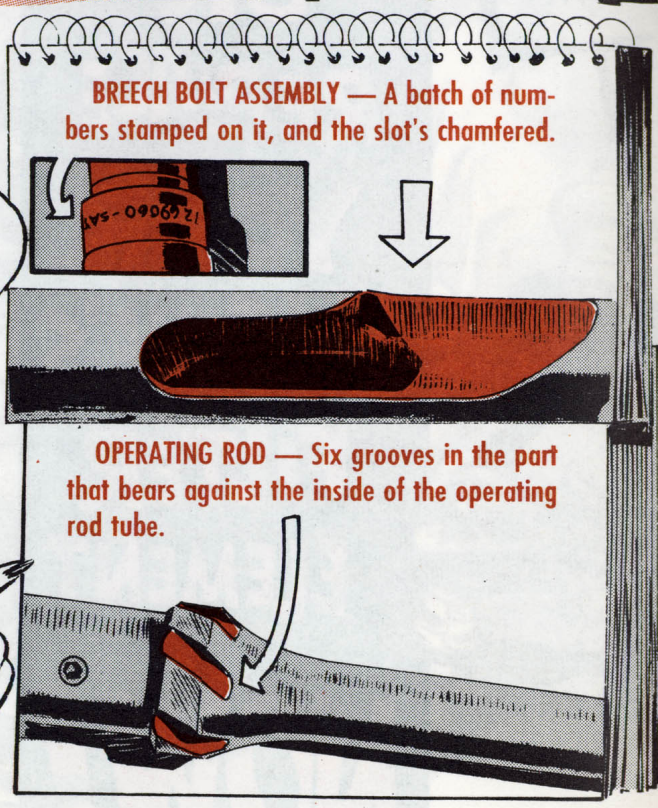
FIREPOWER

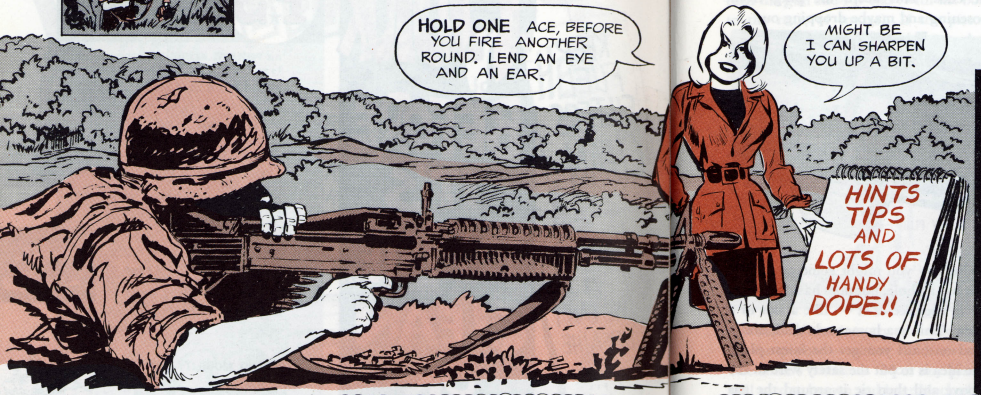
YOUR M60

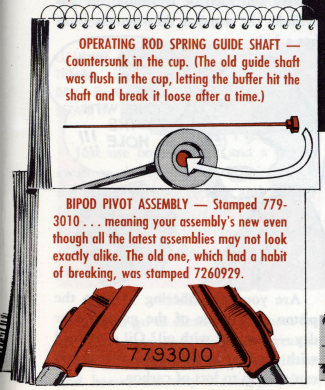

HOLD ONE ACE, BEFORE YOU FIRE ANOTHER ROUND. LEND AN EYE AND AN EAR.

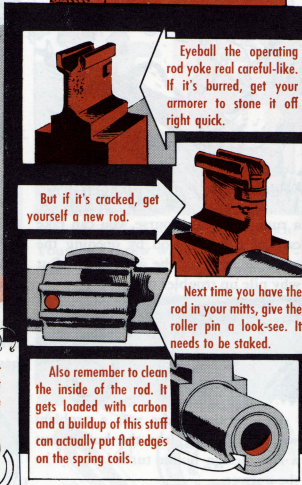
SOMETIME BACK A DEAL CHANGED 4 PARTS OF THE M60. MAKE SURE YOUR SHOOTIN' IRON HAS 'EM. IF ANY ARE MISSING, GET YOUR ARMORER TO MAKE REPLACEMENTS PRONTO -- HERE'S WHAT TO LOOK FOR:


BREECH BOLT ASSEMBLY — A batch of numbers stamped on it, and the slot's chamfered.
OPERATING ROD — Six grooves in the part that bears against the inside of the operating rod tube.

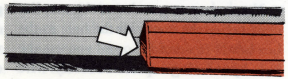
YOUR M60 ROUNDUP





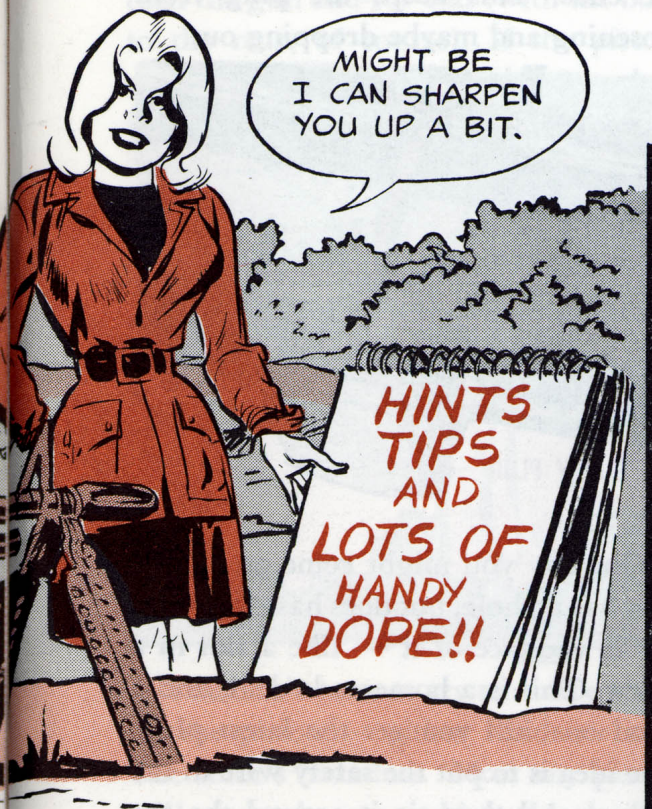


TIP — No trigger squeezing with your M60 — not if you want to save wear and tear on the operating rod's sear notch. Pull back the trigger quick-like . . . and then let it go just as fast. This keeps the notch from crashing into the sear.

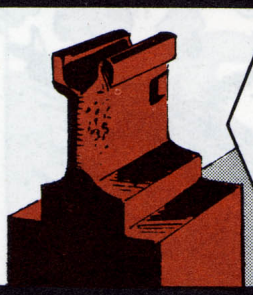


MORE

ROUNDUP

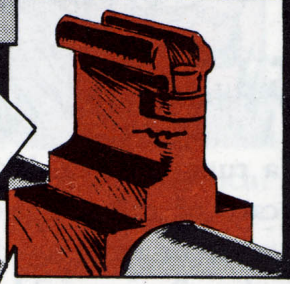


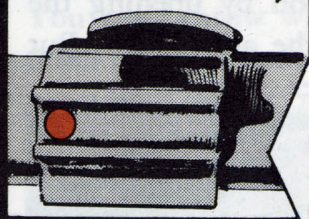
KEEP THAT ROD OPERATING



Eyeball the operating rod yoke real careful-like. If it's burred, get your armorer to stone it off right quick.

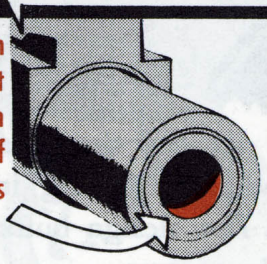
But if it's cracked, get yourself a new rod.



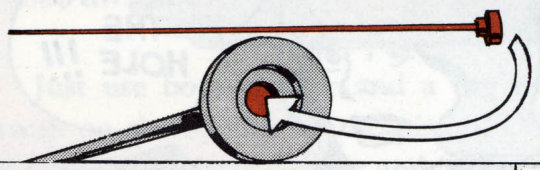


Next time you have the rod in your mitts, give the roller pin a look-see. It needs to be staked.

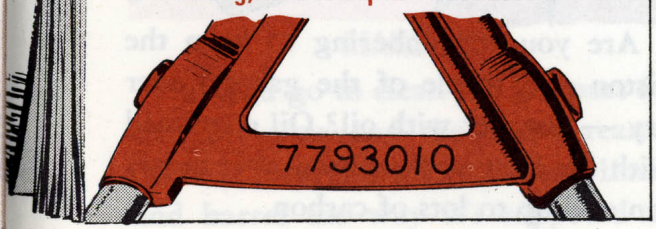
Also remember to clean the inside of the rod. It gets loaded with carbon and a buildup of this stuff can actually put flat edges on the spring coils.



OPERATING ROD SPRING GUIDE SHAFT — Countersunk in the cup. (The old guide shaft was flush in the cup, letting the buffer hit the shaft and break it loose after a time.)



BIPOD PIVOT ASSEMBLY — Stamped 779-3010 . . . meaning your assembly's new even though all the latest assemblies may not look exactly alike. The old one, which had a habit of breaking, was stamped 7260929.



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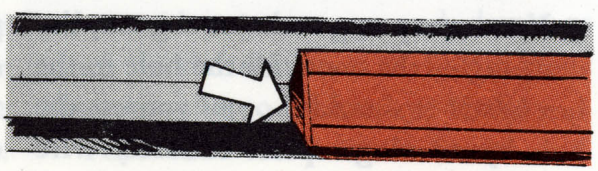
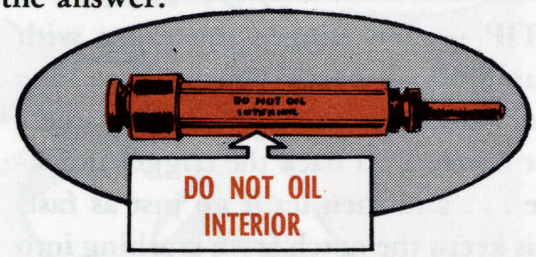


P.S. MORE

You know what happens when you have too much wear and tear on the sear notch. Right . . . the gun keeps on firing with the trigger released — like

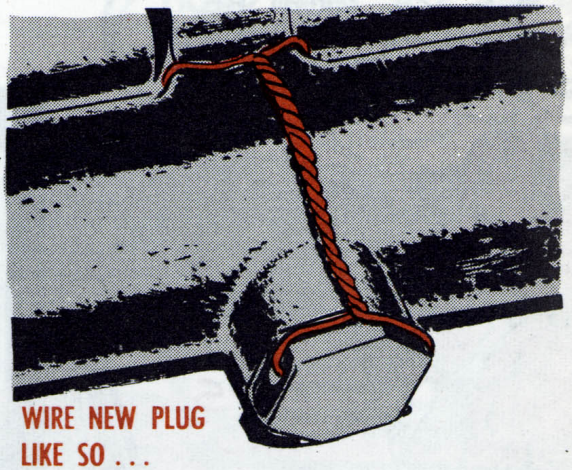
a runaway nag. 'Course, you can take care of this situation by opening the cover or twisting the ammo belt. But why pile up trouble?

At one time there was a problem with oil leaking into the buffer, but a new design buffer turned out to be the answer.



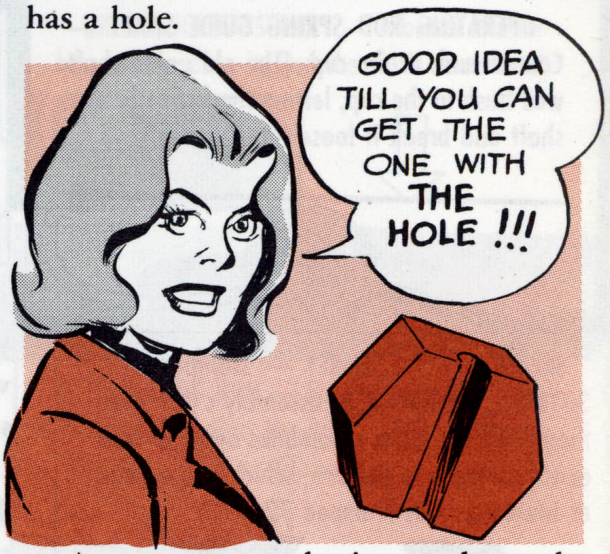
A GASSER

Your weapon got the new gas cylinder plug — the one with the hole in the hex head? It should . . . and you use the hole by running a piece of safety wire through it . . . fastening the ends around the gas cylinder . . . and then twisting the ends. This keeps the plug from loosening and maybe dropping out.



WIRE NEW PLUG LIKE SO . . .

One day you might come on a plug that has no hole, but does have a groove cut in the face of it — like a slot in a screw. This is a homemade deal, and a good one, till you get the latest plug. The idea is to put the safety wire in the groove and then tie it around the gas cylinder the way you do when the plug has a hole.

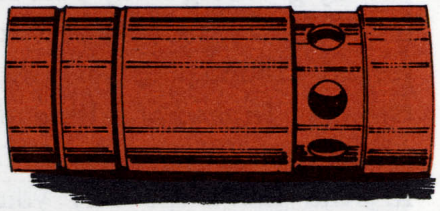


Are you remembering to keep the piston and inside of the gas cylinder dry — not wet with oil? Oil combined with the heat of the piston as it moves can add up to lots of carbon.

As you know . . . you should hear the piston move back and forth as you turn the gun end-for-end (with the bolt to the rear, of course). If the piston doesn't move, there's a good chance that it's been coated with oil.

You don't want to try to scrape color off the piston — either inside or out. The color's harmless. 'Most any piston will turn to brown and later black after firing the gun for a time.

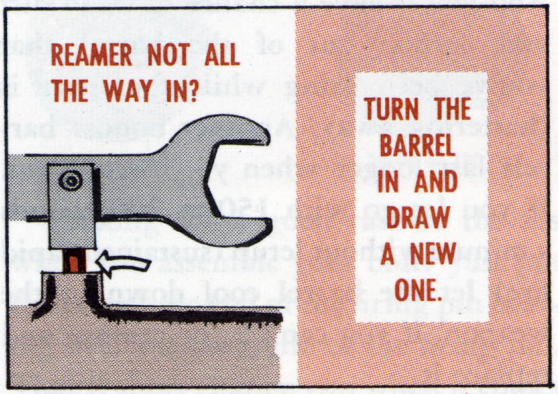
CLEAN OFF THE OIL . . . DON'T SCRAPE IT.



Just use bore cleaner and a rag or swab on the outside of the piston. On the inside use bore cleaner and a cleaning brush. O'course, if the piston's carboned up real bad, get your armorer to clean it with carbon removing compound PC-111A.

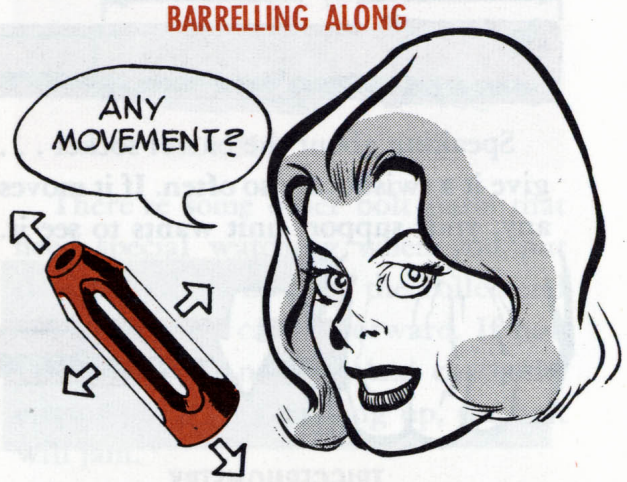
REAMER TIP

Say you go to clean the gas port for the first time and the entire reamer doesn't disappear inside the gas cylinder and barrel the way it's supposed to. Steer clear of fighting it . . . the tip might break off. On some weapons, the barrel and gas cylinder ports don't quite line up . . . so the reamer won't pass through 'em.



You know what to do if somehow you bust the reamer on your combination screwdriver and reamer wrench? You don't throw what's left away . . . that's for sure. Your support people can put a new reamer on the wrench.

BARRELLING ALONG



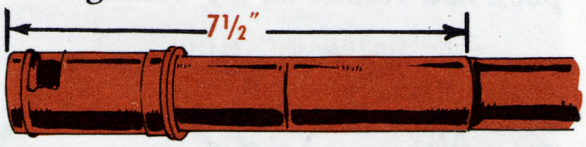
You probably heard it before, but it's worth repeating. If you can turn the flash suppressor up to one sixteenth of an inch it's OK. And if the suppressor moves sideways or up and down as much as the thickness of half-a-horse hair, it wants to be fixed yesterday.

Your M60 has a spare barrel . . .

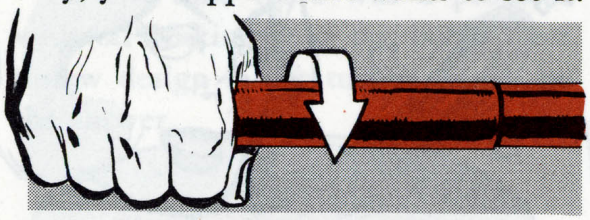
PS MORE

and it's not just for looks. After firing at a normal rate of 150 to 200 rounds a minute (short bursts) for a total of 1000 rounds — switch barrels. A fresh barrel will help prevent stoppages. And you'll have a chance to clean dirt and carbon out of the barrel that you've been using while the spare is chattering away. Another bonus: barrels last longer when you switch 'em. If you let go with 150 to 200 rounds a minute without letup (sustained rapid fire) let the barrel cool down in the weapon, if you can . . . or remove and replace it.

No telling how many guys have looked inside a barrel of their M60 and gulped as they spotted a "ring" about 7½ inches from the face of the barrel socket. No sweat. That's just an expansion groove in the stellite liner.

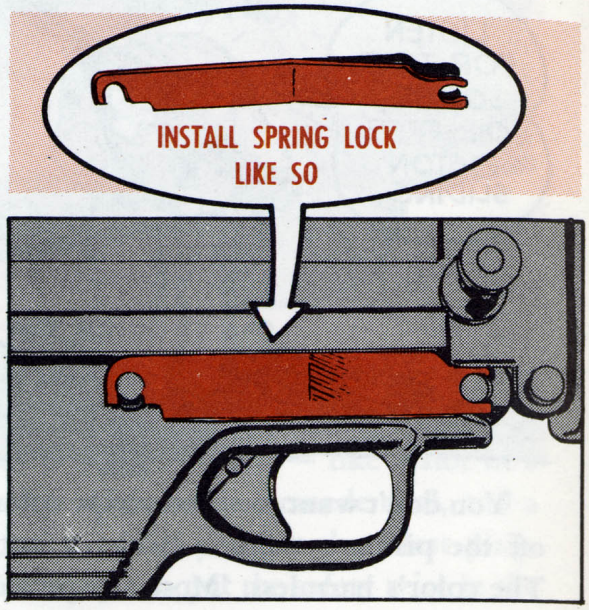


Speaking about the barrel socket . . . give it a twist every so often. If it moves any, your support unit wants to see it.



TRIGGERNOMETRY

At one time the trigger mechanism spring lock was just that — a spring . . . the leaf kind. It had a bend in the middle so that it would be under tension when it was fastened to the trigger and holding pins. Trouble was . . . many a guy bent the lock to make it straight. That took out the tension and the spring lock would drop off the trigger pin.

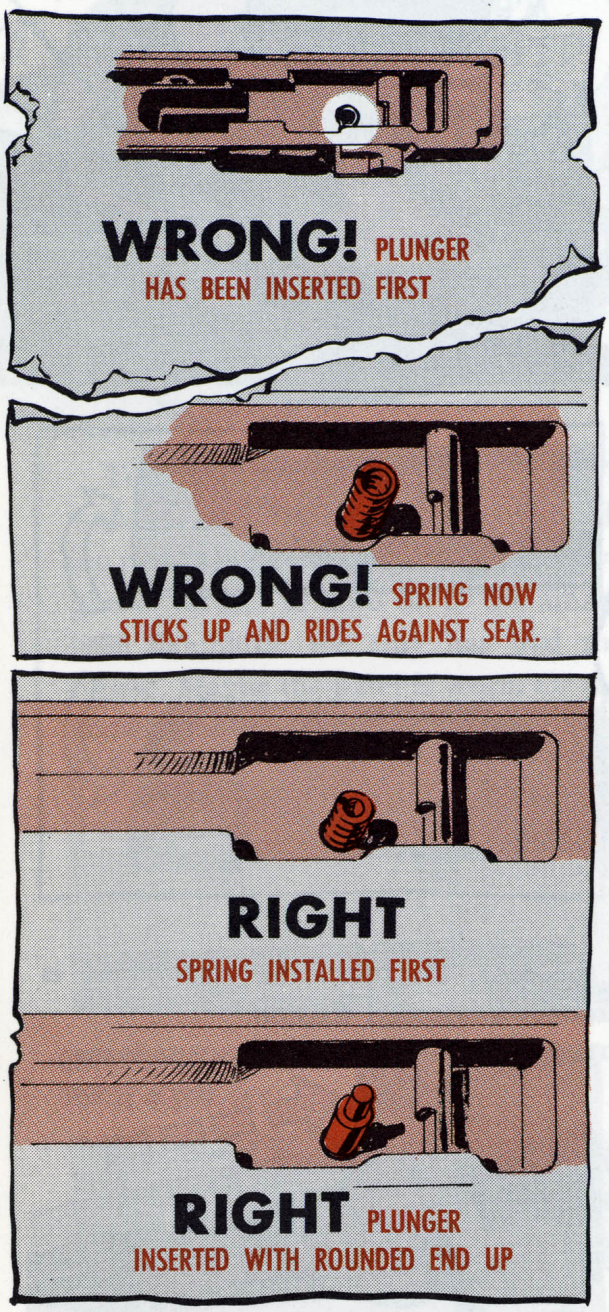


The slide rule people took care of that by grinding away part of one edge of the spring lock so that it could be turned around and snapped over the two pins. Instead of falling off the trigger pin, the spring is really fastened to it. And that's the way you want to install it, even though it's tougher for you to take off.

WATCH THIS

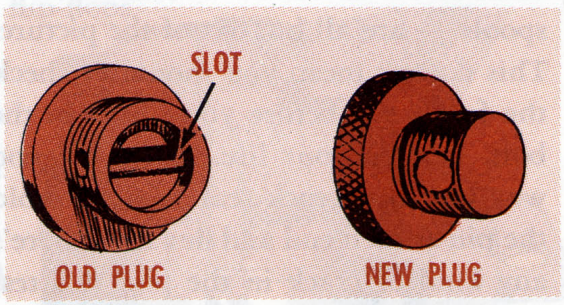
The trigger mechanism is one place that proves that it's the little things that count. When you go to assemble the components, be sure you put in the spring and then the plunger — with the rounded end of the plunger up. If you

put in the plunger and then the spring, the spring will cant to one side under the sear. Result: a jamup during firing.

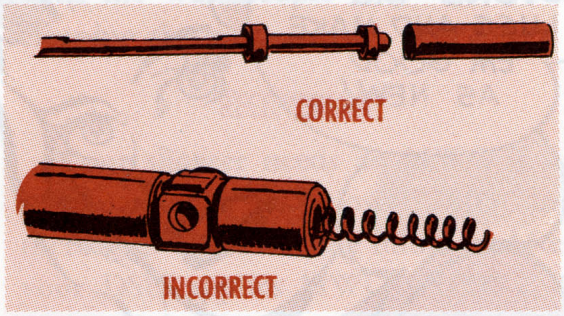


BREECH BOLT BRIEFS

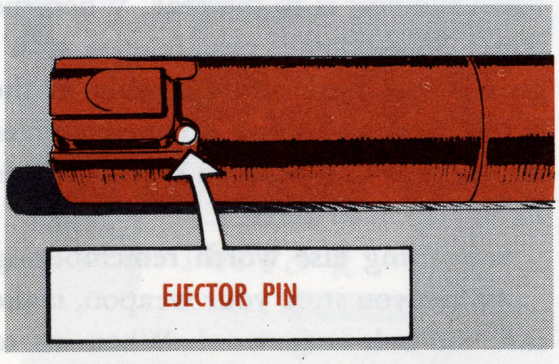
Gone should be the days of busted breech bolt plugs — now that new ones are in the supply system. You can tell the new plug in a flash. The slot is missing and a plunger is in the pin hole to aid in holding the bolt plug pin in place. Also there is a disk and insert hammered into the plug.



Looking for a good case of the fits when you assemble your bolt? Just put the large hole end of the firing pin bearing over the back end of the firing pin. That'll short change you when it comes to room for the bearing. And with leftover spring, you'll have a ball trying to screw in the bolt plug.

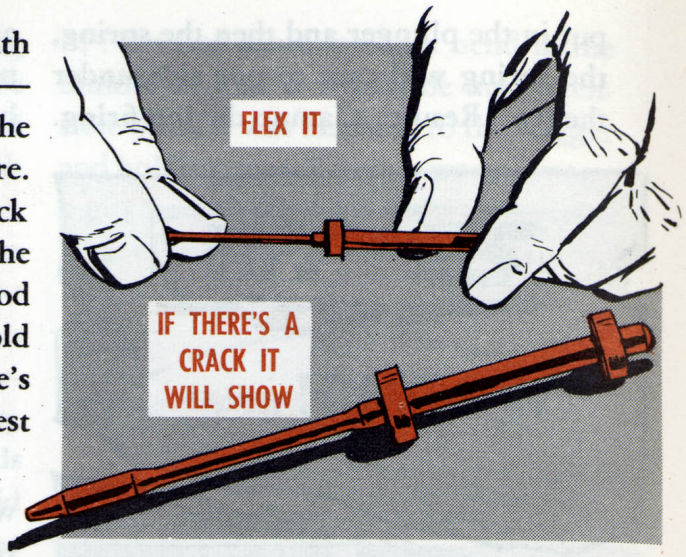


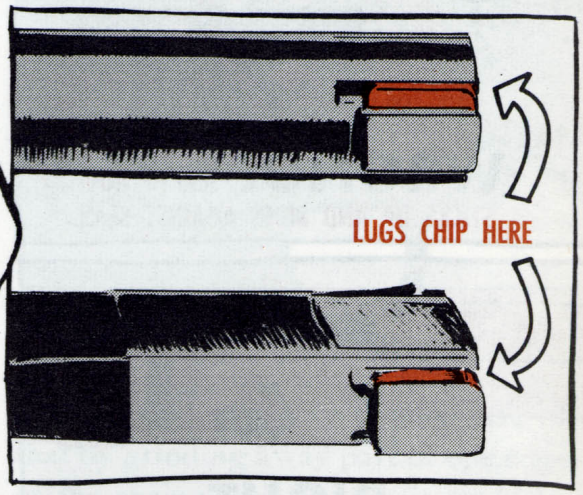
There're some other bolt parts that need special watching when you put them together. Be sure the roller end of the actuator cam is forward. If not, you won't fire nohow. And check the ejector pin. If it's sticking up, the bolt will jam.



PS MORE

You should be in good shape with firing pins now that the old ones — those that would break at the base of the spools — are all but out of the picture. This doesn't mean you shouldn't check the firing pin before you put it in the bolt. Not on your life. And one good way to spot a crack real fast is to hold the pin at each end and flex it. If there's any kind of crack in the pin, this test will find it.



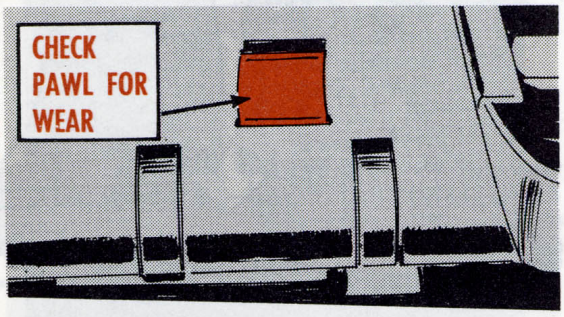


It's an old story, but one that needs retelling: Close the gun's cover only when the bolt is to the rear. When the bolt is in any place else, its cam won't go into the feed cam assembly in the cover. And slamming down the cover with a deal like this can sure scramble a component or three.

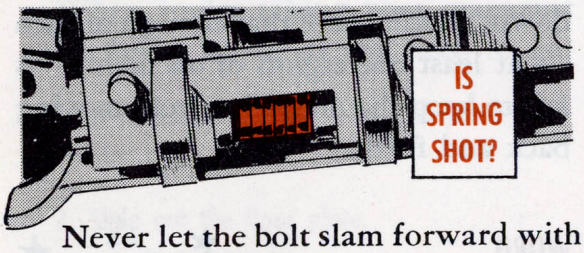
Something else worth remembering . . . when you store your weapon, make sure the bolt is forward. When it's to the rear, the operating rod spring is under unneeded tension.

NO COVERUP

Too pooped to participate . . . that's what can happen to the feed tray holding pawl after a heap of firing. The pawl plumb refuses to hold on to the ammo belt. Could be the tray has had the course. Maybe the pawl is worn. Or the

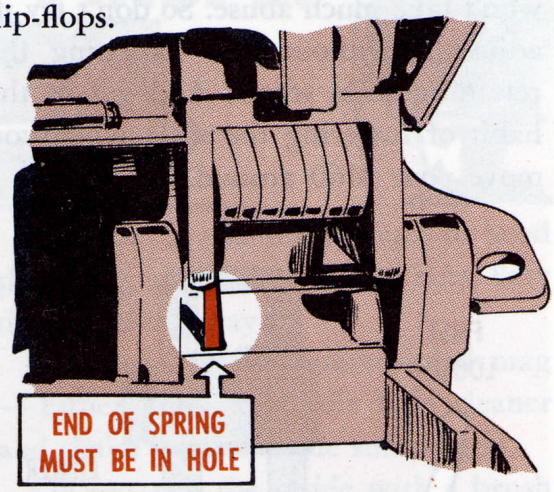


pawl spring is shot. Let your armorer take a gander.



Never let the bolt slam forward with the barrel out of the receiver. It's one sure way to wind up with a battered feed tray assembly.

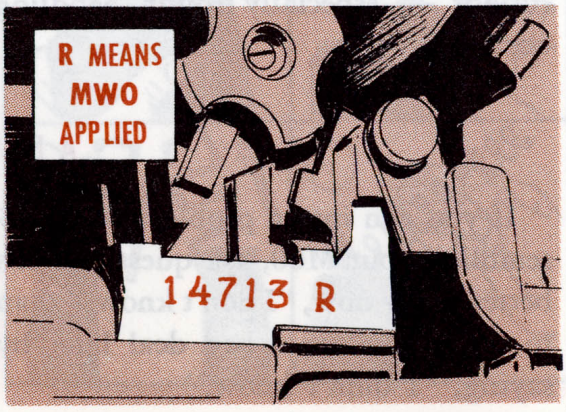
There's a real easy goof you can make when you assemble the cover to the weapon — forget to put one end of the spring in the hole in the receiver. Without the spring in the hole, the cover flip-flops.



Incidentally . . . the spring and hinge cover pin are two items to watch for rust. They're real rust collectors, what with the way people skip 'em when cleaning the gun.

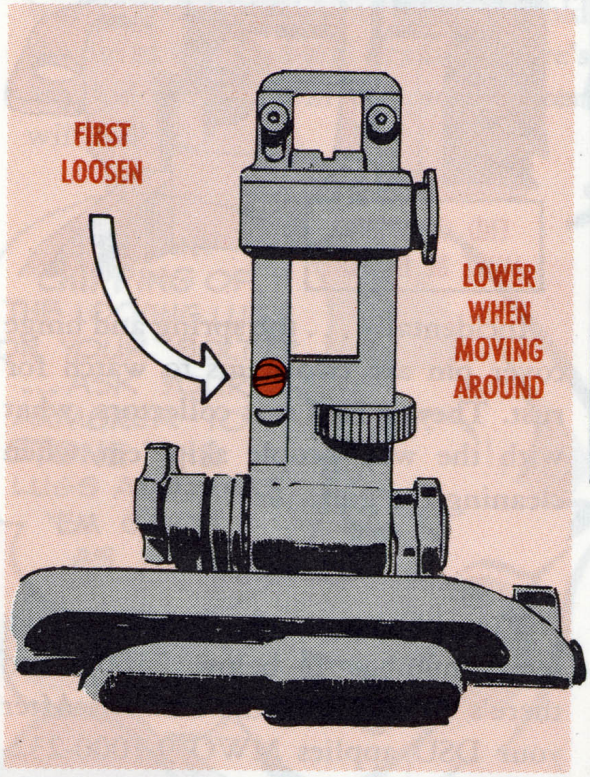
RECEIVERSHIP

Your shooter needs an MWO if its serial number is below 77605 and there's no "R" after the number. After your DSU applies MWO 9-1000-232-30/1 (30 Jul 65), the angle of the bullet ramp will be changed by about 5 degrees. This halts the kind of trouble you run into when a round hits the primer of another round that hasn't been fired and is still in the chamber as the one behind it tries to horn in.



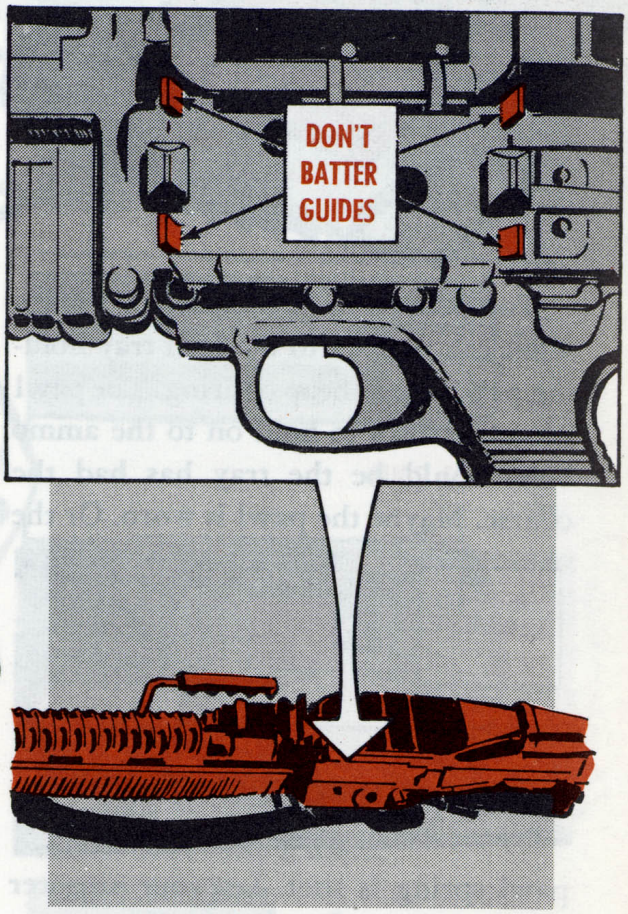
PS MORE

The rear sight elevation scale on your weapon is made of aluminum and it won't take much abuse. So don't try to adjust it without first loosening the retaining scale screw. And get in the habit of lowering the scale when you move your M60 around.



There's been a lot of talk about the way the magazine bracket guides (maybe you call 'em prongs) seem to break just about every time you turn your back. They don't really bust this often, but they will bend or snap off on occasions — especially rough handling occasions.

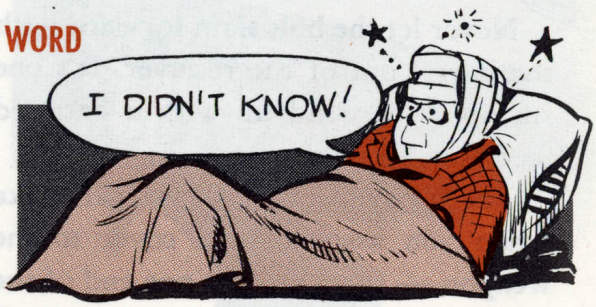
When your weapon's not going to see any action for a spell — like when it's being moved in a vehicle or stored — flip down the bipod legs to keep the shooter from flopping over on its side and battering the guides.



You can also have the guides cut down, making sure that enough of each — at least one eighth of an inch — is left to keep the magazine from moving back and forth.

A FINAL WORD

If you run into a problem while assembling your M60, ask questions. It's better to say now, "I don't know," than to try to explain a bad deal later by saying, "I didn't know."

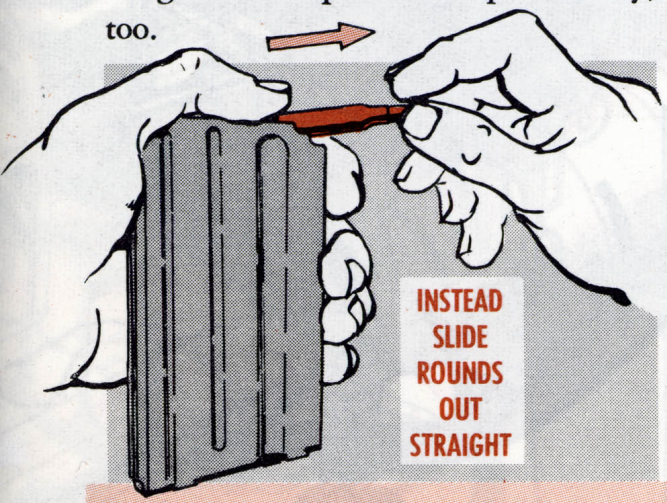


XM16E1 RIFLEMAN:
TRY OGLING THESE . . .

MAGAZINE PINUPS!

Twenty's fine, but 21's too many when you're loading cartridges in the magazine of your XM16E1 rifle. It won't give you extra fighting power . . . more likely it'll put you out of the fight —'cause that extra round will spread the lips and the ammo won't feed right.

When you're unloading, skip flipping the rounds out with another cartridge. You'll spread the lips this way, too.



Careful . . . you don't stretch or bend the spring and don't bend the tabs. Easy does it all the way.

For cleaning the disassembled mag —Either dunk it in rifle bore cleaner and shake it good while submerged

OR—scrub the inside with a brush soaked with cleaner

OR—Use a rag soaked in bore cleaner.

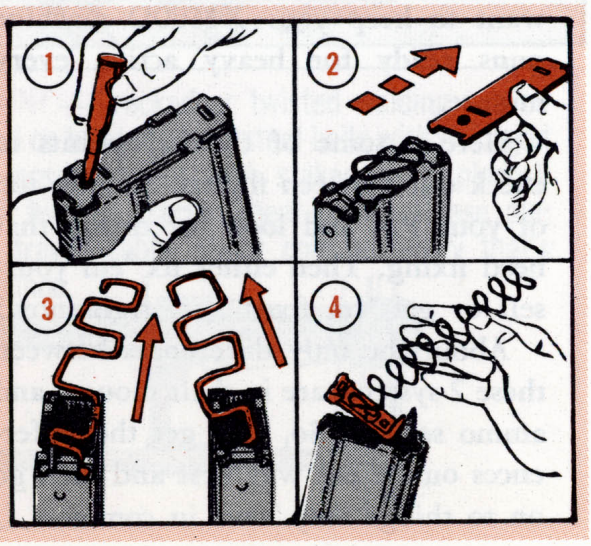
Then dry it out good with a swab or rag (or even your shirtail in a pinch).

After you clean the inside of the magazine, wipe the spring off and see that it's not busted or deformed. If it's OK, apply a very-very-very light coat of oil—using a rag dampened with PL Special.

This mag is coated with dry lubricant. It doesn't need any lubing except for the spring.

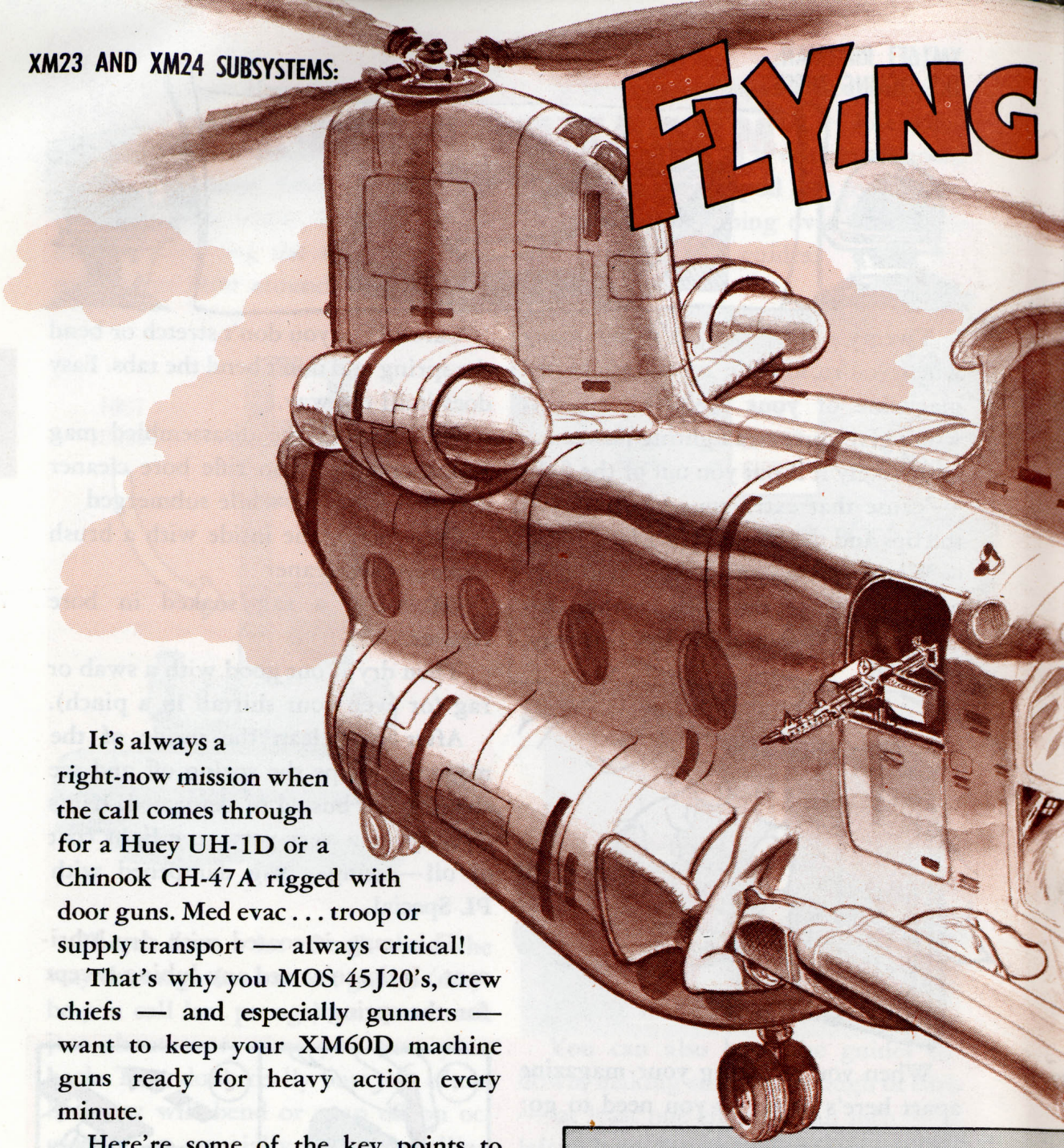
When you're taking your magazine apart here's as far as you need to go:

1. Stick cartridge point in here to press the floor plate release.
2. Slide out the floor plate.
3. Work the spring back and forth gently as you tug it outward.
4. Stop tugging when the follower reaches the tabs and ears and don't separate the spring from the follower.



XM23 AND XM24 SUBSYSTEMS:

FLYING



It's always a right-now mission when the call comes through for a Huey UH-1D or a Chinook CH-47A rigged with door guns. Med evac . . . troop or supply transport — always critical!

That's why you MOS 45J20's, crew chiefs — and especially gunners — want to keep your XM60D machine guns ready for heavy action every minute.

Here're some of the key points to check out between flights. Stay on top of your PM and look for things that need fixing. Then either fix 'em yourself or get 'em fixed . . . right now!

About the only differences between these 2 systems are in their mounts and ammo set-ups. So, let's get the differences out of the way first and then go on to things they have in common.

XM23 MOUNT — Binding; loose mounting; cracked or twisted base and beam; busted or missing beam lockwires; cracked or twisted pintle; loose pintle mounting nut; missing cotter pin; cracked traversing lock or one that's lost its "spring"; dusty, rusty pivot steel ball bearings; loose retainer or one that's not staked in 2 places; busted hook for the ammo box.

FLYING SHOTGUNS

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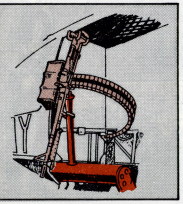
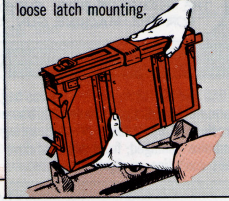
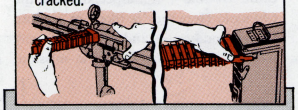


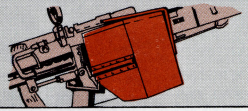
AMMO BOX & COVER (XM23) — Cracks or dents that'd affect the flow of ammo; loose latch mounting.



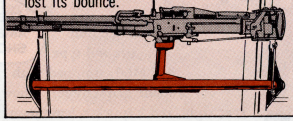
AMMO BOX CHUTE ASSEMBLY (XM23) — Chute kinked or twisted; links and fittings damaged; adapter bent or cracked.



AMMO CAN ASSEMBLY (XM24) — Plunger cracked or bent; spring weak or kinked; loose rivets; dents.

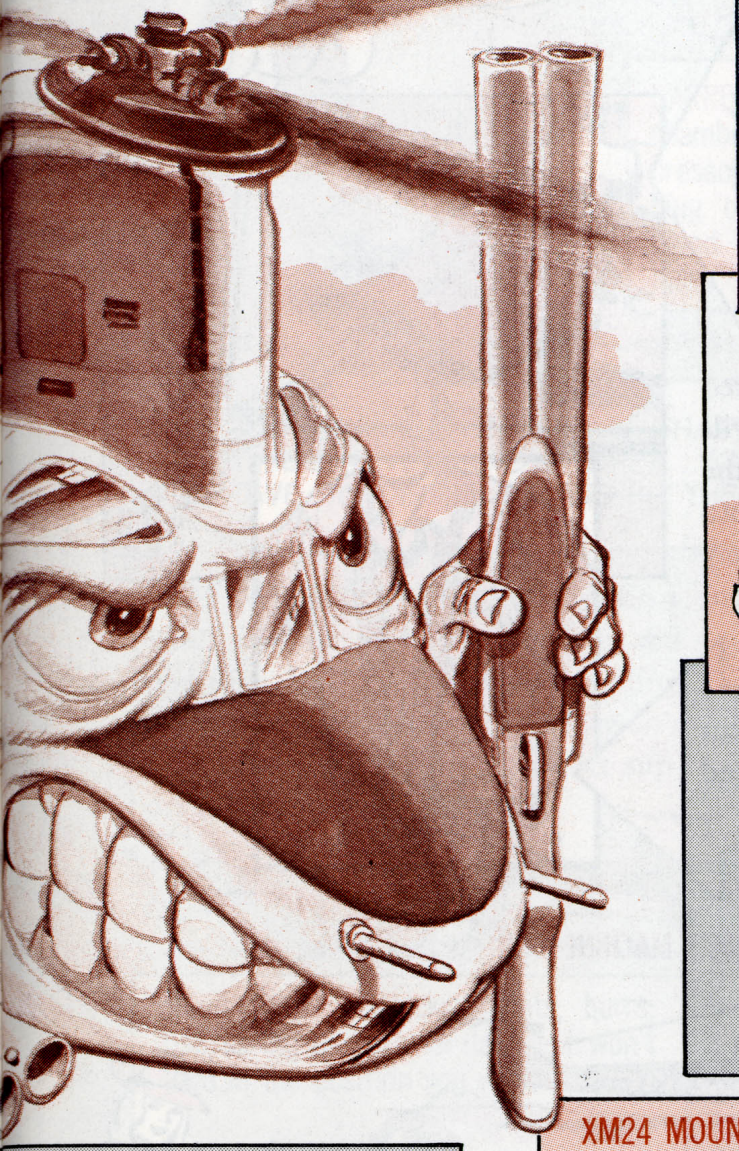


XM24 MOUNT — Cracked or twisted welding assembly; cracked or twisted pivot; steel balls with damaged surfaces; loose retainer (not staked in 2 places); cracked or twisted bracket; bent quick release pin; broken or frayed cable; shock cord assembly that's lost its bounce.



MORE

SHOTGUNS



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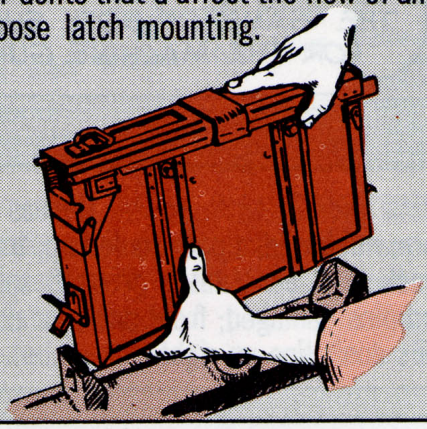

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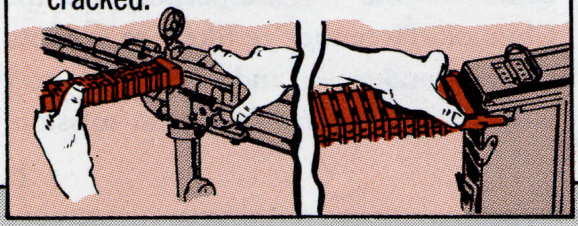

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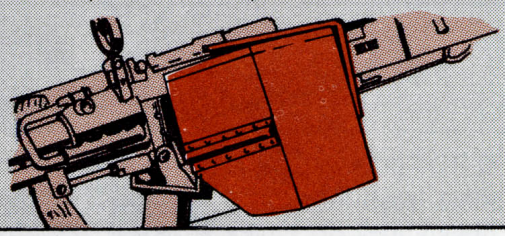

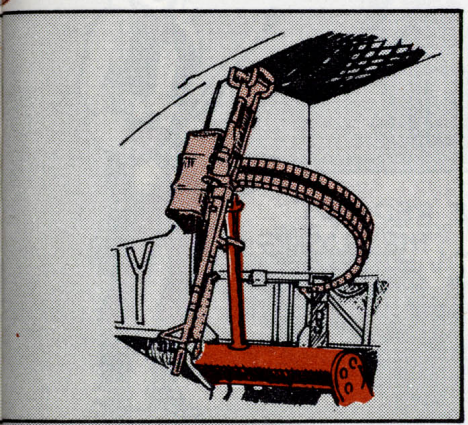

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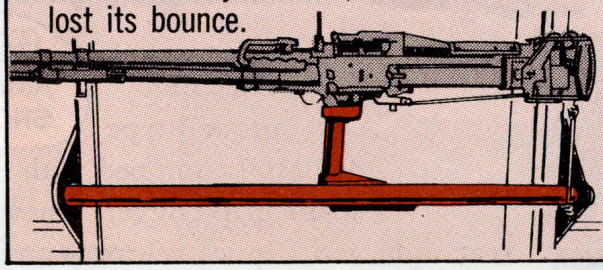
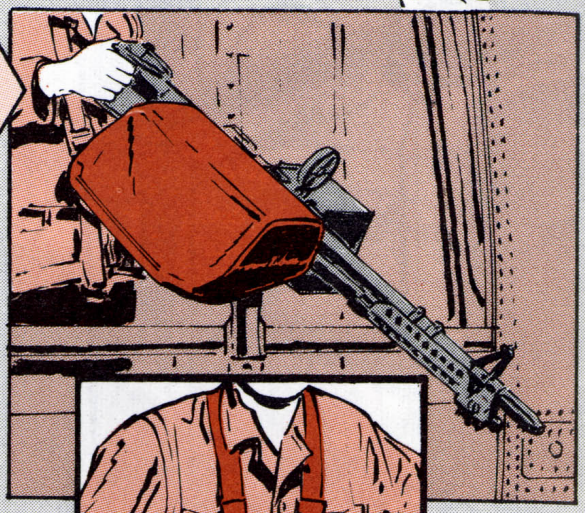


PS MORE

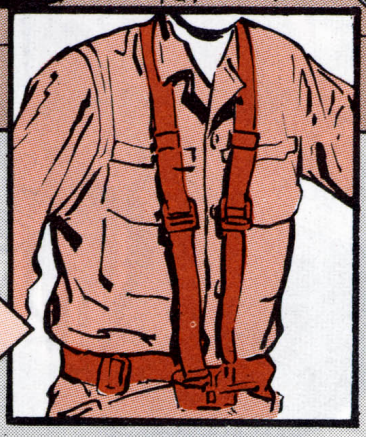
NOW, FOR THE **PARTS** THAT ARE THE SAME ON BOTH SUBSYSTEMS (EXCEPT FOR THE MACHINE GUN, OF COURSE).

EJECTION CONTROL BAG — Canvas bag torn; mildewed; zipper fouled up; frame cracked or bent; latch or latch spring and pins damaged; front and rear dovetails don't line up right.

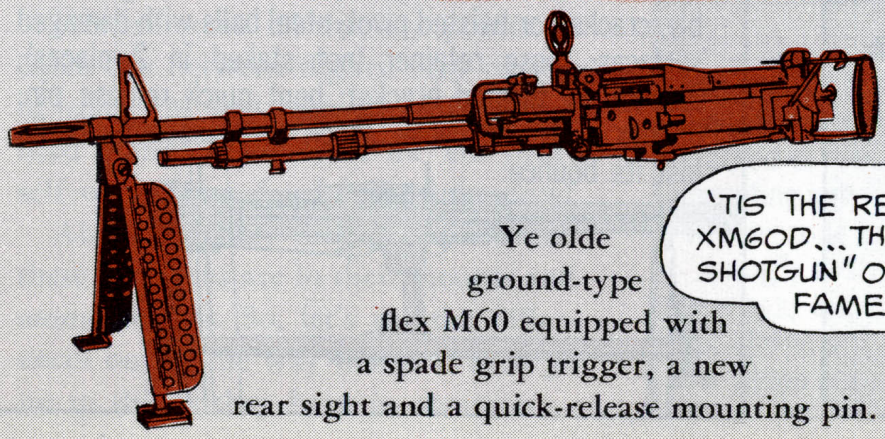


Be mighty sure the bag's zippered during firing or the spent rounds will cause trouble . . . especially on the Chinook. Here they're likely to get into the air intakes — and everybody may have to walk back from the mission.

HARNESS ASSEMBLY — Straps cut or badly frayed; buckles bent; rings and snaps won't hold.

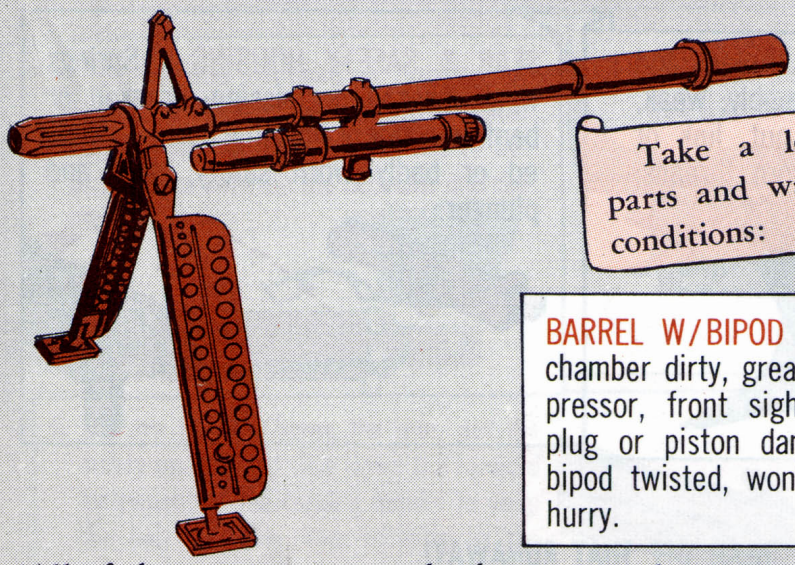


YOUR XM60D MACHINE GUN



Ye olde ground-type flex M60 equipped with a spade grip trigger, a new rear sight and a quick-release mounting pin.

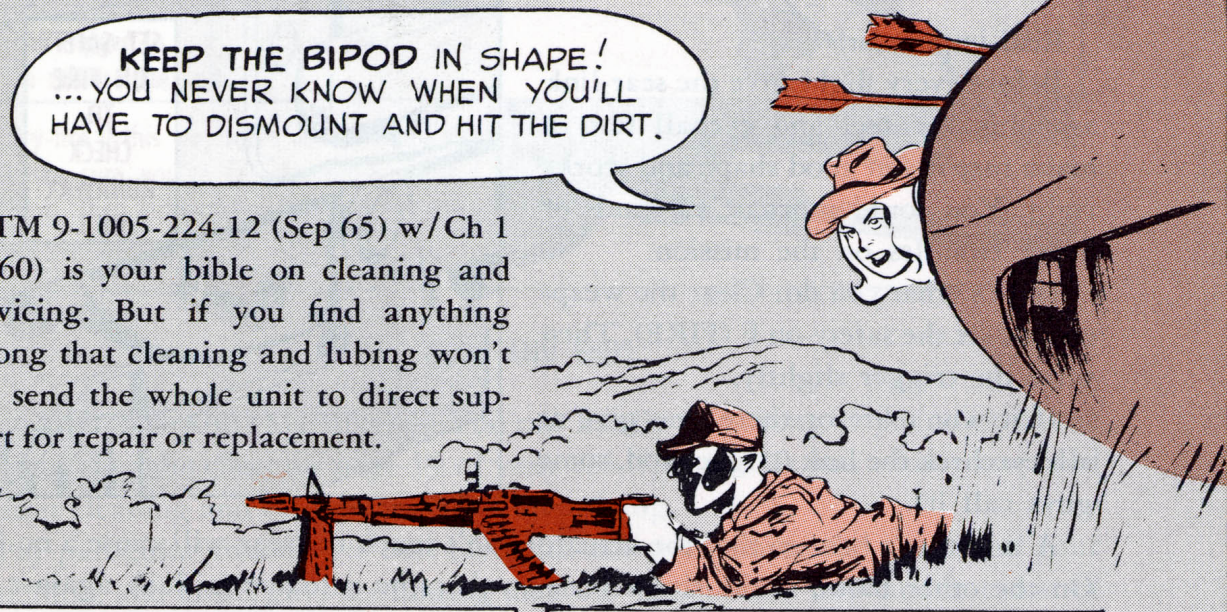
'TIS THE RED HOT XM60D... THE "FLYING SHOTGUN" OF VIETNAM FAME!



Take a look at some of these parts and watch for these unhealthy conditions:

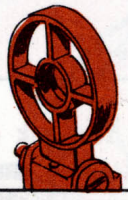
BARREL W/BIPOD ASSEMBLY — Bore and chamber dirty, greasy, carboned; flash suppressor, front sight, barrel, gas cylinder plug or piston damaged; powder fouling; bipod twisted, won't lock or release in a hurry.

(All of these parts are exactly the same as the ones on the ground weapon.)

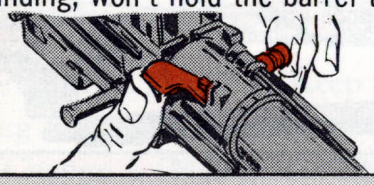


TM 9-1005-224-12 (Sep 65) w/Ch 1 (M60) is your bible on cleaning and servicing. But if you find anything wrong that cleaning and lubing won't fix, send the whole unit to direct support for repair or replacement.

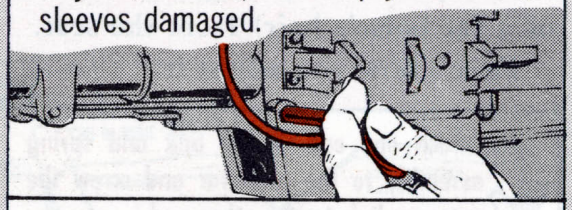
REAR SIGHT — Cracks, twists, burrs; ball, spring and retainer damaged; won't hold in the position you want.



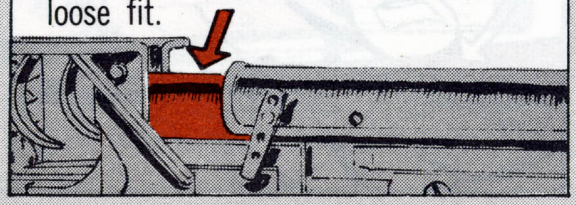
BARREL LOCKING LEVER — Too loose, binding; won't hold the barrel tight.



MOUNTING PIN & CABLE — Pin bent or won't slide in and out real easy; cable frayed (watch it, could rip your hand!), sleeves damaged.

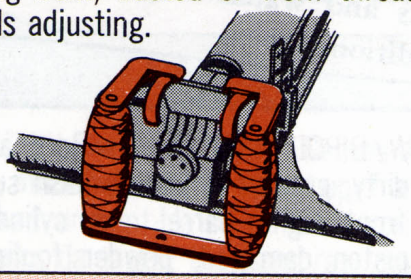


BOOT — Dirty, greasy, tears, rips and loose fit.

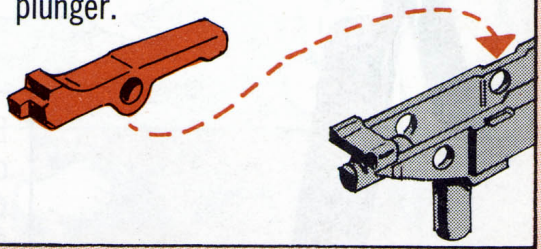


PS MORE

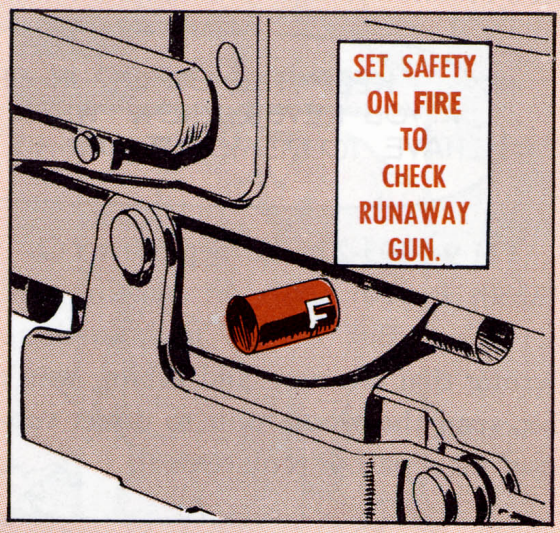
GRIP & TRIGGER — Worn threads and burrs on the retainer assembly; weak, bent or busted springs; nut, link or spring bent, busted or worn threads; needs adjusting.



SEAR & SAFETY HOUSING — Springs weak, broken or missing; cracked or bent activator or housing; burred, cracked or badly worn safety, sear and plunger.



HEAD OFF THAT RUNAWAY!



Real important!

Before every flight give the sear-link assembly the feel and eyeball test to make sure it's in good shape and works right. You could shortcut all kinds of firing troubles on the mission.

Here's what you do: Clear the weapon and set the safety on F (FIRE). Then press the trigger slightly.

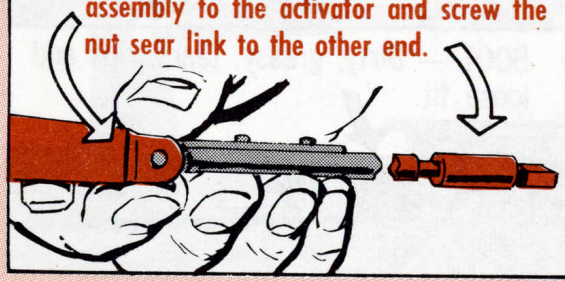
If it won't fire or there's no give at all, eyecheck the link (trigger rod, some guys call it).

A link that's bent so that the actuator can't touch the sear will cause a no-fire. On the other hand, if the link's bent so that the actuator is flush against the sear, you'll get a quick trigger — a runaway gun.

But, if the link's straight and true and you still have a firing problem, the link assembly needs adjusting to set the activator 1/64 inch (that's about the width of a fat horse's hair) from the sear.

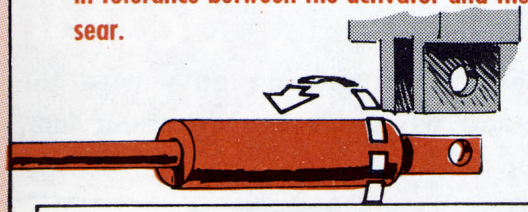
Here's how you adjust it:

1. Attach one end of the link and spring assembly to the activator and screw the nut sear link to the other end.

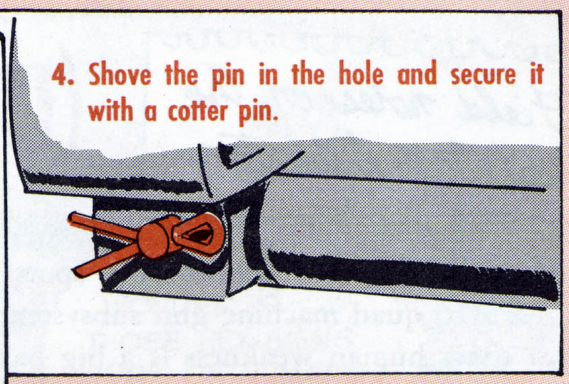


2. Hold the nut sear link end against the spade grip assembly and screw out the nut sear link assembly till you can line up the hole in the nut sear link with the hole in the spade grip.

3. With the holes still lined up, turn the nut sear link 1/2-turn clockwise (to the right). This will provide that all-important 1/64-in tolerance between the activator and the sear.

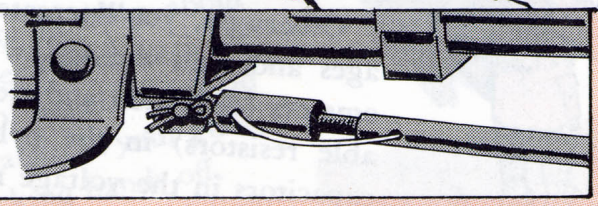


4. Shove the pin in the hole and secure it with a cotter pin.



5. OK, try it out. Charge the gun, put the safety on FIRE and slow down the forward movement of the cocking handle to keep the bolt assembly from banging up the tray as you lightly press the trigger. It should take only a 1/8-in movement of the trigger (a real light feel) for the sear to release the bolt.

6. Dry-fire it this way three or four times to make sure you've got the right adjustment. Then lockwire the link and nut and put the safety back on SAFE.

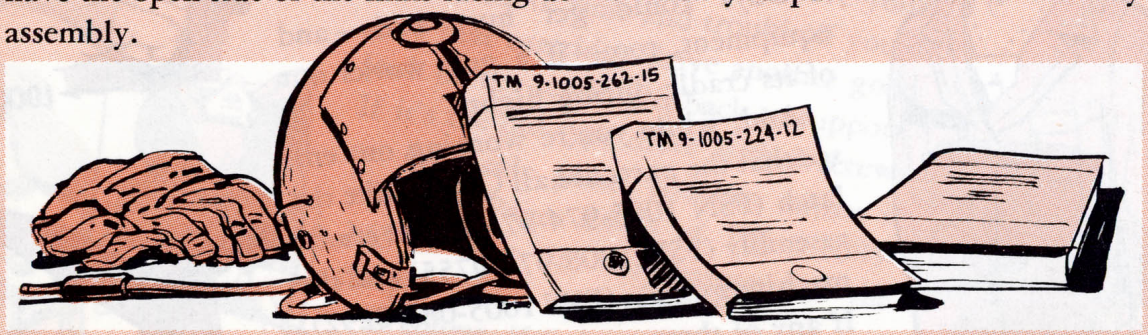


ODDS AND ENDS

CLEANING AND LUBING — You can hardly go wrong if you stick to the poop in the lube chart on page 19 of your -15 TM. It tells you what parts need mostest cleaning and care immediately after firing.

Pay particular attention to that bit about not over-lubing the innards of your gun. More and more, guys are finding that too much lube is a major cause of trouble.

LOADING — Do like the TM says on page 17, but make proof positive you have the open side of the links facing down when you put the belt on the tray assembly.



PUBLICATIONS — Keep these handy and use 'em: TM 9-1005-262-15 (Aug 65) w/Change 1 and 2 (XM23 & 24); TM 9-1005-224-12 (24 Sep 65), w/Change 1 (M60); and TM 9-1005-262-ESC (23 Aug 65).

PS END

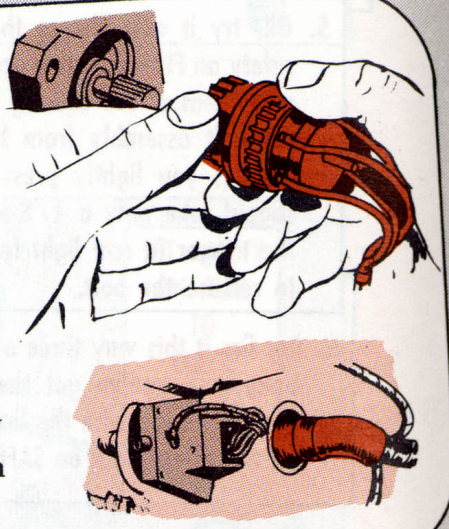
Field notes on the M6/XM16 Subsystem

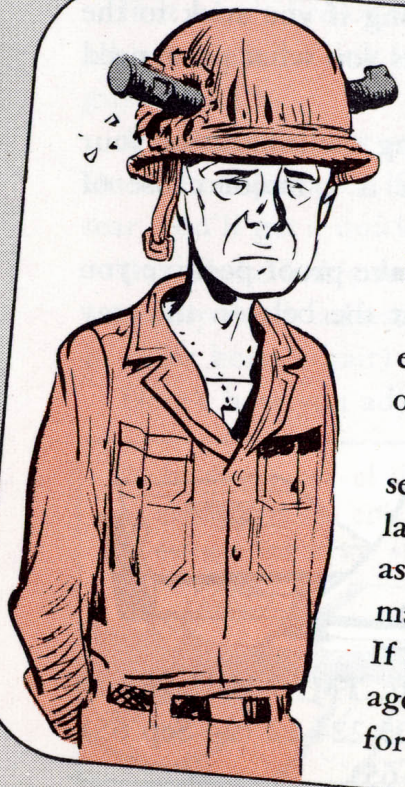
(UN) POPULAR

Here're a few of the trouble spots that've been griping guys with the M6/XM16 quad machine gun subsystem—and what you can do about 'em. Most times human weakness is a big part of the hex.

FORGETFUL? OK, then, remind yourself to pull the circuit breaker before connecting or disconnecting any major assembly while trouble-shooting your system with the power on.

Otherwise, you'll create peak voltages and ruin the follow-up potentiometers (deflection and elevation variable resistors) in the pylon or blow capacitors in the voltage regulators in the control panel.

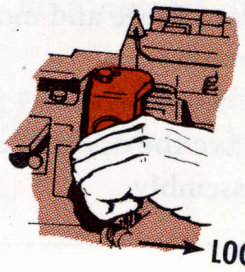


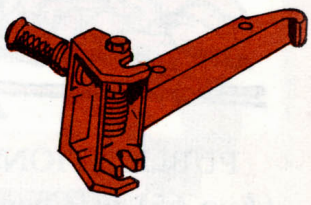


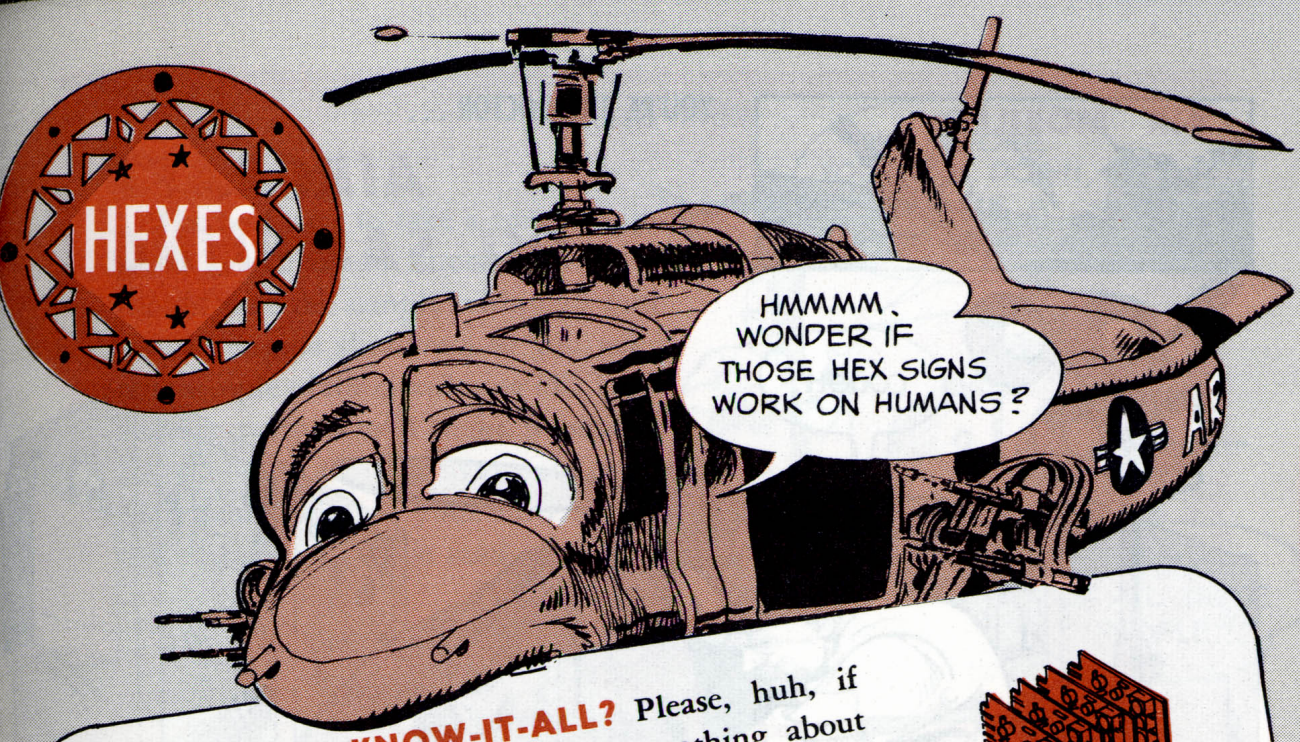
CARELESS? Make sure the gun latches are really locked when you mount M60C's on your Huey. Para 7b of your -12 TM has the scoop. And double check before every takeoff that they're still locked tight.

Guys could get hurt bad—and equipment, too—if a gun works out of its cradle during flight.

And, while you're working on 'em, see that the parts are all OK . . . like the latch (FSN 1005-974-9757), the cradle assembly (FSN 1005-974-9755) and the machine gun pin (FSN 1005-083-0292). If any of these are badly worn or damaged, get support to replace 'em—before the next mission.

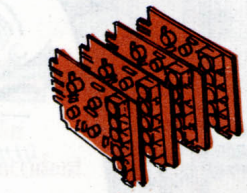


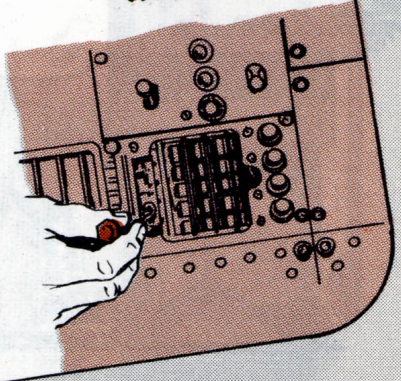




KNOW-IT-ALL? Please, huh, if you don't know from nothing about adjusting the amplifier (card) variable resistor in the control panel to get rid of chattering or vibration in your guns, keep your cotton-picking hands off.

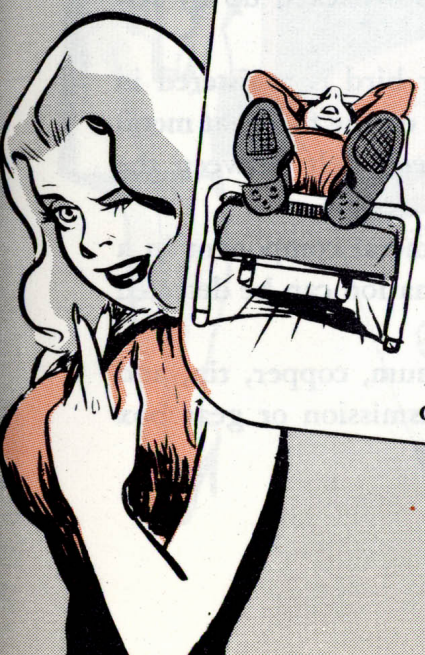
It takes know-how and a real light touch with the jeweler's screwdriver to make the adjustment called for in para 38b of your -12 TM. These cards are extra-delicate and if they get damaged your mission could be grounded till a replacement comes through support.

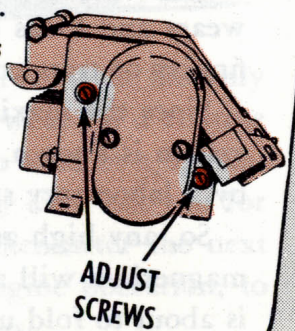




A MITE LAZY? It might save your outfit a lot of time and trouble if you'd give that cartridge drive another good look before sending it back to support. If it's the old-type drive with 2 screws on each side plate, you can adjust it yourself. Pages 64-65 of TM 9-1005-243-12 (Oct 63) w/Changes has the poop.

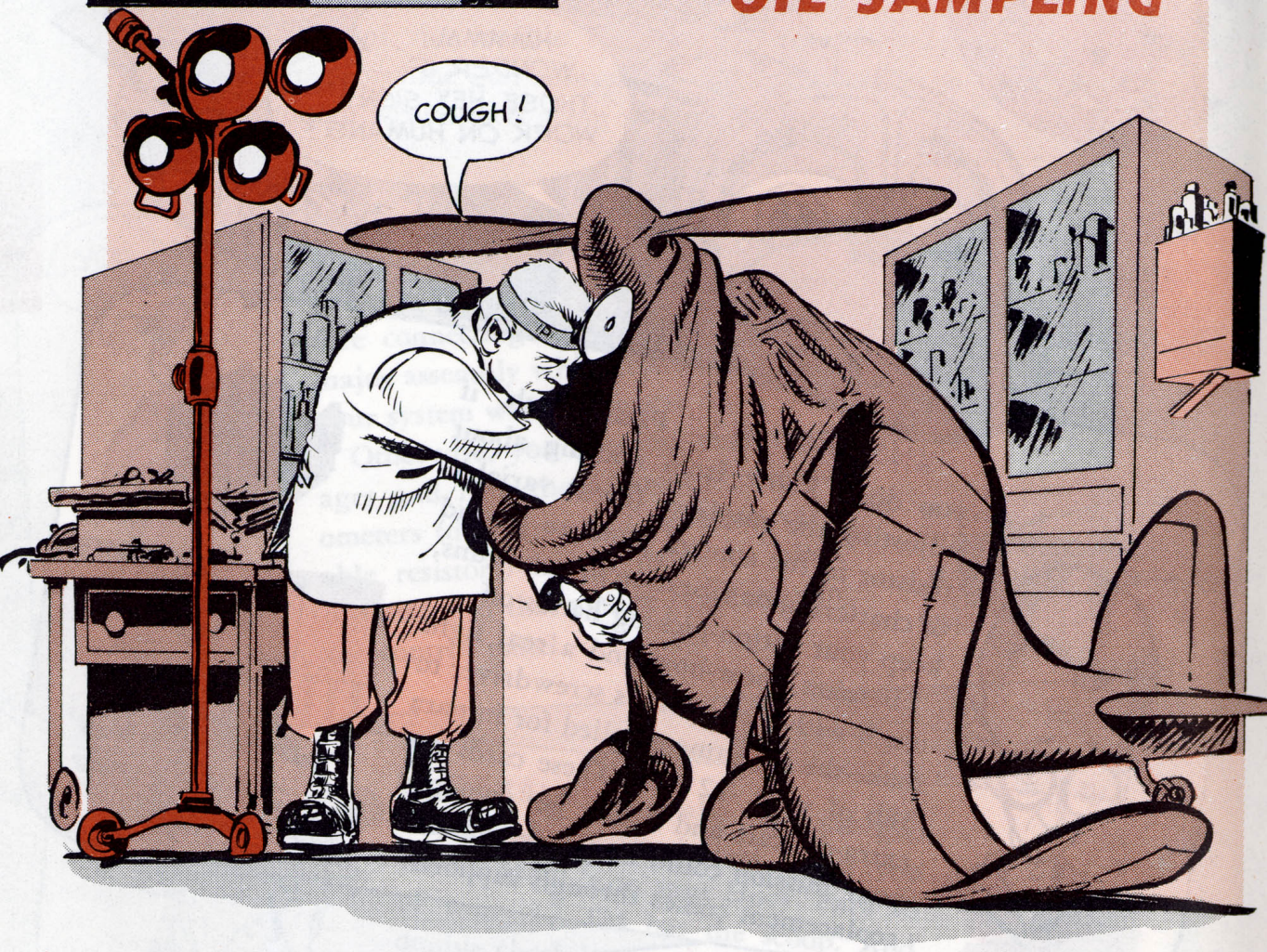
O'course, if it doesn't have these adjustable screws, support'll have to take over.





YOU'RE THE DOCTOR . . .

AIRCRAFT OIL SAMPLING



The role of the unit aircraft mechanic is becoming more and more a scientific one, with the publication of TB 55-6650-300-15 (9 Jun 66) backed up by AR 750-13 (5 Dec 66) on spectrometric oil analysis.

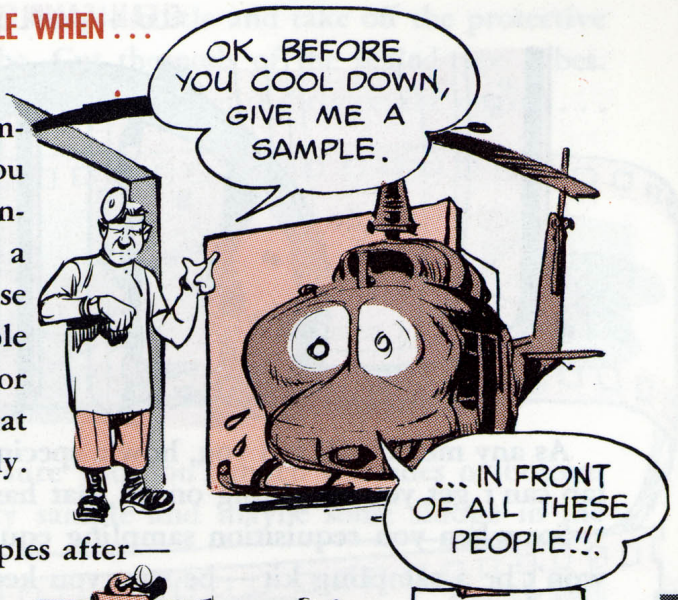
Like a medic, you can now take specimens when your bird is registered in the oil sampling program. 'Course, this sampling is based on the fact that metal wears and kicks off microscopic particles that can't be seen, felt between the fingers or trapped by filters and chip detectors.

Since the maximum amount of normal wear for each metal component in a system is known, this "threshold limit" of metal contamination can be detected by a laboratory spectrograph or spectrophotometer.

So, any high amount of iron, silver, chromium, aluminum, copper, tin, and magnesium will alert you to the fact that an engine, transmission or gear box is about to fold up.

SAMPLE WHEN . . .

The best time to take a routine sample is at each 25-hr Intermediate. You should take the sample within 15 minutes of engine shutdown so you get a true sample of the circulating oil. These regular samples will make it possible for the lab to set up a wear pattern for each component on your bird so that future samples can be read accurately.



Also, you should take special samples after—

You'll get a report from the lab **only** when there is high wear on a routine sample or when you send in a **special** sample. The lab may even ask you for a special sample, taken after the next 5 hours or so of engine operation, to confirm their findings.

P.S. MORE

CLEAN SAMPLES, PLEASE!

As any medic will tell you, how a specimen is taken is mighty important. The lab can't get you a reading on oil that has dirt and sludge in it.

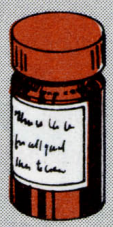
So, when you requisition sampling equipment thru regular channels — there won't be a sampling kit — be sure you keep all the containers closed.

Here's all the sampling gear you need:

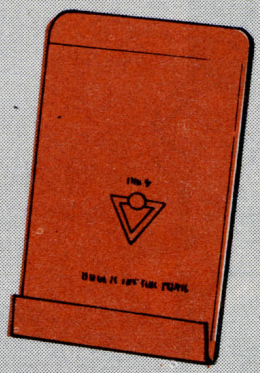
1. Polyethylene sampling tubes:

Size	FSN
15"-3/8" OD	4720-933-4415
20"-3/8" OD	4720-933-4416
20"-1/4" OD	4720-933-4417

2. Sampling bottle, FSN 8125-933-4414.



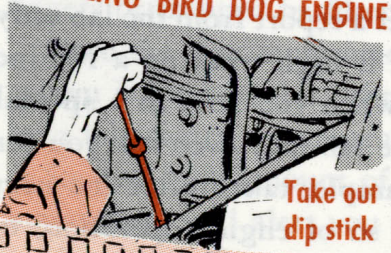
3. Mail bag FSN 8105-290-0340.



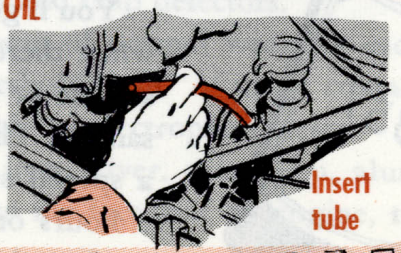
SIPHON SAMPLE LIKE SO . . .

Your sample is either siphoned thru the tube or drained directly into the sample bottle. See the TB for the sampling location and the right size tube to use. Here's the scientific approach — using the tube in an oil tank filler neck.

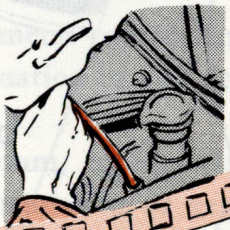
SAMPLING BIRD DOG ENGINE OIL



Take out dip stick



Insert tube



Siphon your sample

CLEAN SAMPLES, PLEASE!

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2. Sampling bottle, FSN 8125-933-4414.

3. Mail bag FSN 8105-290-0340.

SIPHON SAMPLE LIKE SO . . .

Your sample is either siphoned thru the tube or drained directly into the sample bottle. See the TB for the sampling location and the right size tube to use. Here's the scientific approach — using the tube in an oil tank filler neck.

SAMPLING BIRD DOG ENGINE OIL

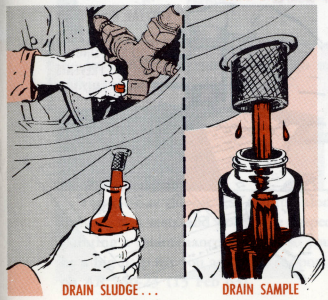
Take the oil tank cap off, open the sample bottle and take off the protective caps on each end of the sampling tube. Cut the ends of the sealed-type tubes. Be sure you don't drop the tube on the ground or get it dirty on the engine . . . you want a clean sample.

Put the tube into the tank but be sure you don't touch the sides or bottom of the reservoir, or you'll get a dirty sample and maybe some sludge in the bargain.

Put a finger over the tube and lift out your sample, or make with a little mouth suction and hold the sample in the tube with your finger. Fill the bottle until it's within 1/2 inch of the top. Put the cap on with a little muscle so the bottle won't leak.

Throw away the sampling tube because a contaminated tube can't be used again.

TAKE DRAIN SAMPLE THIS WAY



When you can only get your sample by draining, such as a transmission, chances are there will be some sludge and maybe even water at the drain hole so be sure to take along a quart container to get rid of it.

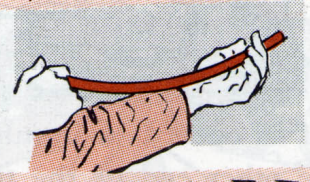
Open the drain plug and drain enough oil into the quart container to clean the opening and drain lines of sludge. Then drain your sample directly into the sample bottle to within 1/2 inch of the top . . . no sampling tube needed.

Cap the bottle tight . . . and you've got your sample.

MORE

Take the oil tank cap off, open the sample bottle and take off the protective caps on each end of the sampling tube. Cut the ends of the sealed-type tubes. Be sure you don't drop the tube on the ground or get it dirty on the engine . . . you want a clean sample.

Hold sample by capping with finger



Oil will not drain easily into sample bottle so . . .

Put the tube into the tank but be sure you don't touch the sides or bottom of the reservoir, or you'll get a dirty sample and maybe some sludge in the bargain.

A little air pressure speeds the drainage

Fill the sample to ½" from top of bottle

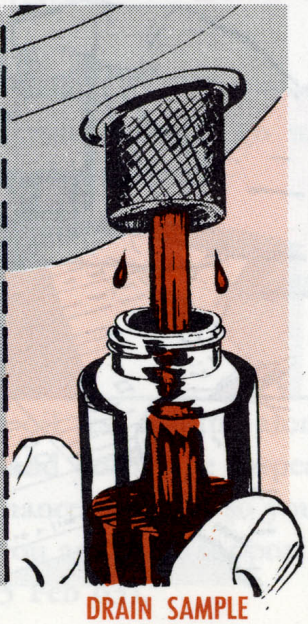
Put cap on tight so bottle won't leak

Put a finger over the tube and lift out your sample, or make with a little mouth suction and hold the sample in the tube with your finger. Fill the bottle until it's within ½ inch of the top. Put the cap on with a little muscle so the bottle won't leak.

Throw away the sampling tube because a contaminated tube can't be used again.

TAKE DRAIN SAMPLE THIS WAY

DRAIN SLUDGE . . .



DRAIN SAMPLE

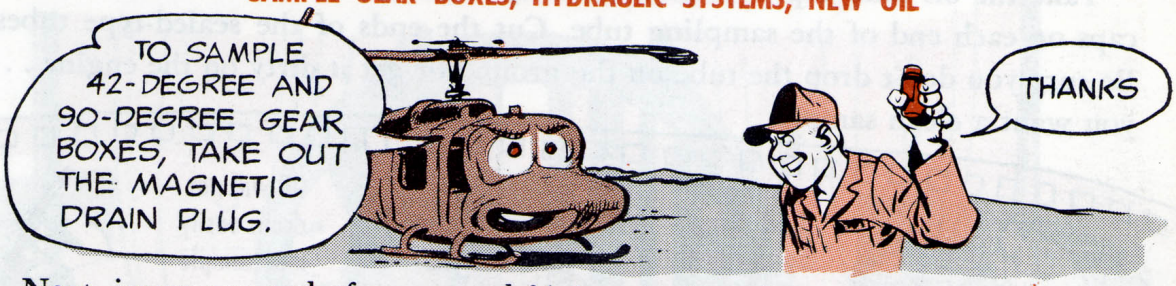
When you can only get your sample by draining, such as a transmission, chances are there will be some sludge and maybe even water at the drain hole so be sure to take along a quart container to get rid of it.

Open the drain plug and drain enough oil into the quart container to clean the opening and drain lines of sludge. Then drain your sample directly into the sample bottle to within ½ inch of the top . . . no sampling tube needed.

Cap the bottle tight . . . and you've got your sample.

P.S. MORE

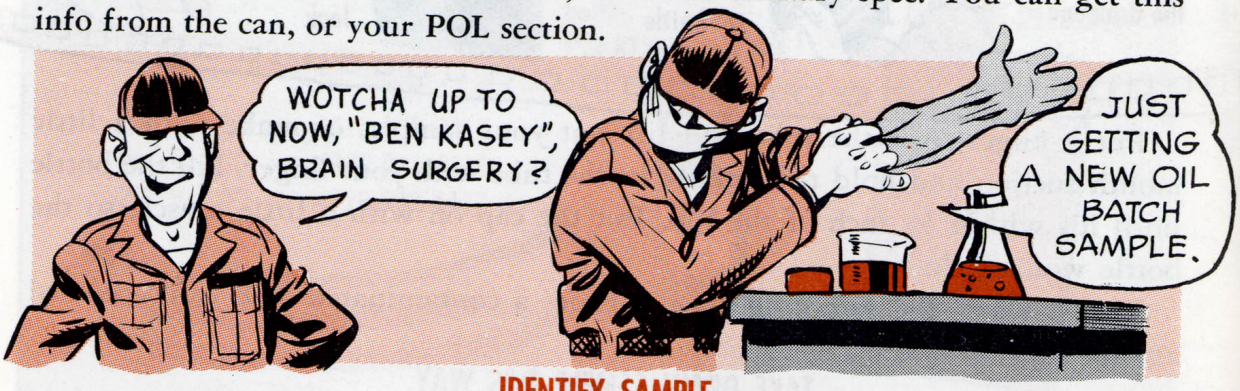
SAMPLE GEAR BOXES, HYDRAULIC SYSTEMS, NEW OIL



Next, insert one end of an opened ⅜-in tube into the sample bottle. Displace the check valve with the other end of the tube, drain your sample into the bottle to within ½ inch of the top and cap your sample.

On hydraulic systems use the tube to sample the reservoir, provided it's part of the circulating system, or drain your sample from the filter housing or from a line that circulates the hydraulic fluid.

When a new oil batch comes into your area the lab also needs an un-used sample to find out if metallic compounds are in the oil additives. These compounds affect the readings on your future samples so be sure you identify the oil batch by number, manufacturer, date and military spec. You can get this info from the can, or your POL section.

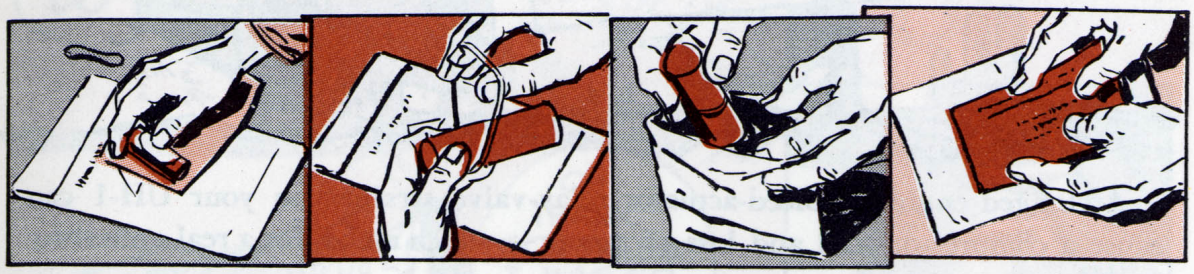


IDENTIFY SAMPLE

All your hospital-clean sampling will go down the drain unless the samples are identified. So, it's mighty important that you fill out completely the sample info sheet that is supplied by the oil analysis lab where you send the samples.

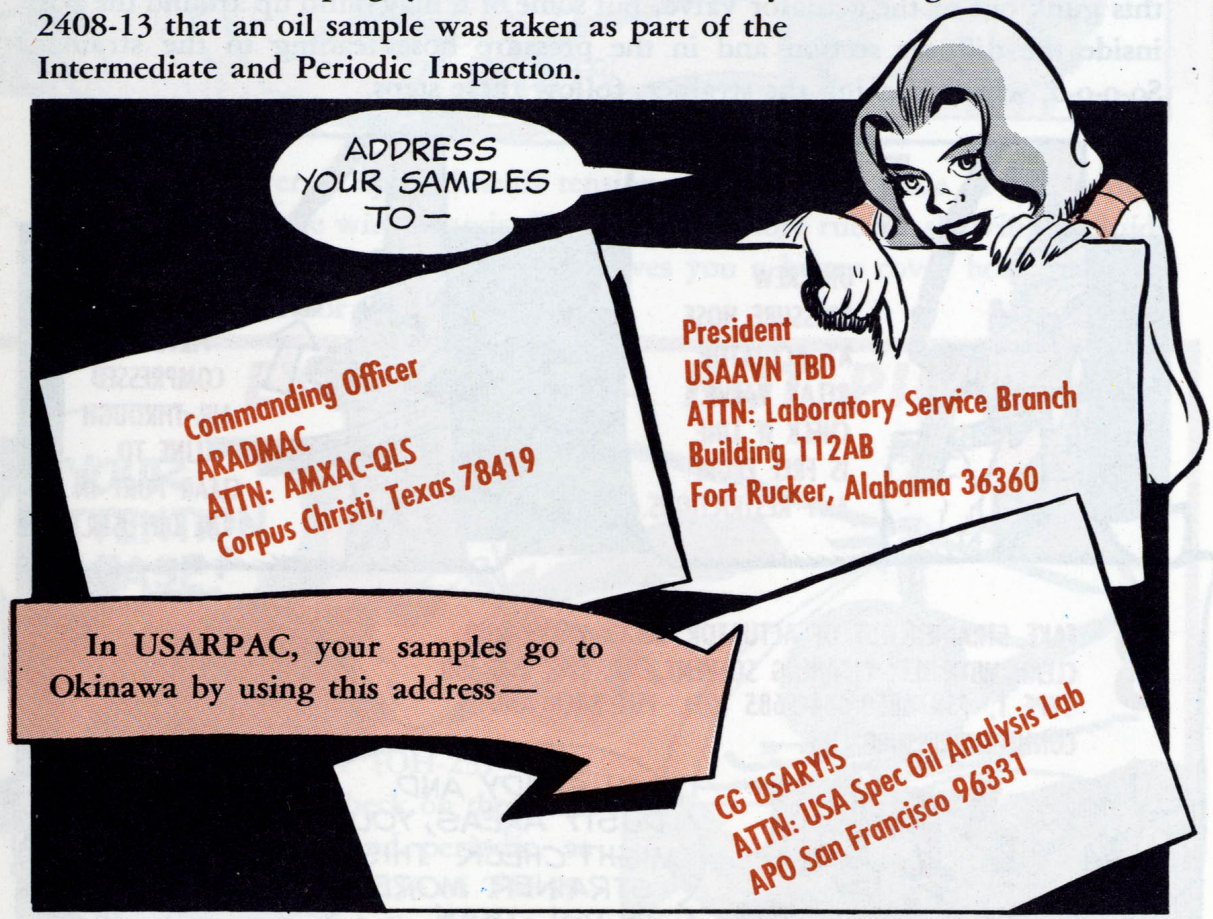
On a special sample be sure you add any important dope, such as — name, address and phone number of person the lab should contact, at the bottom of the form. You'll find complete sampling instructions right on the back of the info sheet.

Wrap the poop sheet around the oil sample bottle with a rubber band. Then put the sample in the mailing bag and send it, pronto, to the lab. **Pronto means immediately.** Never let the sample stand around for a few hours or days. Every minute counts. **MAIL IT THE SAME DAY YOU TAKE THE SAMPLE . . .** airmail under a DA Label 18.



If you're sending a special sample, band the mailing bag with any high visibility tape, preferably RED, FSN 7510-753-4728. Also airmail.

As for record-keeping, you should make an entry on the log book DA Form 2408-13 that an oil sample was taken as part of the Intermediate and Periodic Inspection.



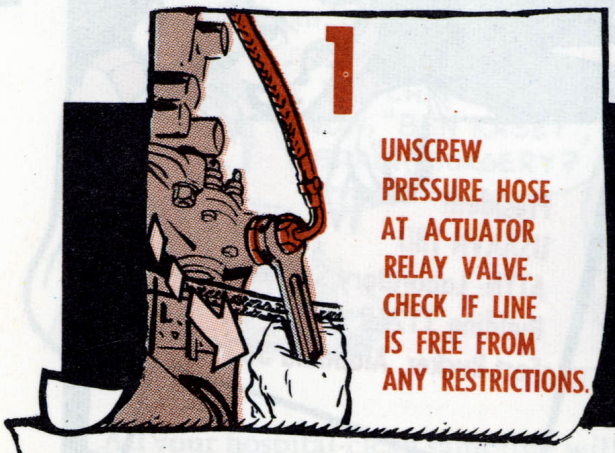
Yessir-e-e-e, the oil test results, along with other poop gained from cylinder compression tests and boroscope inspections, should go a long way toward pinpointing a maintenance problem so you can come up with the solution. It should be a big help for you and your support when deciding to pull an engine, based on AR 750-23 (13 Feb 63).

PS END

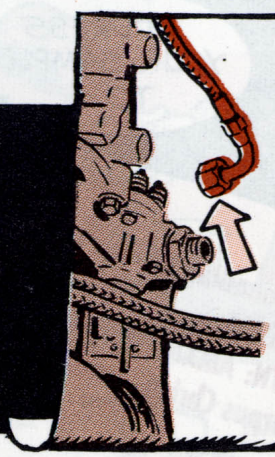
CLEAN THE VALVE STRAINER

A clogged engine airbleed-actuator relay-valve strainer on your UH-1 can cause a compressor stall and loss of power—which makes for a real unhealthy bird.

Foreign particles can be drawn into the engine inlet and directed into the port that supplies air for operating the airbleed actuator. The strainer keeps this gunk out of the actuator valve, but some of it may build up around the port inside the diffuser section and in the pressure hose leading to the strainer. So-o-o-o, when checking the strainer, follow these steps.

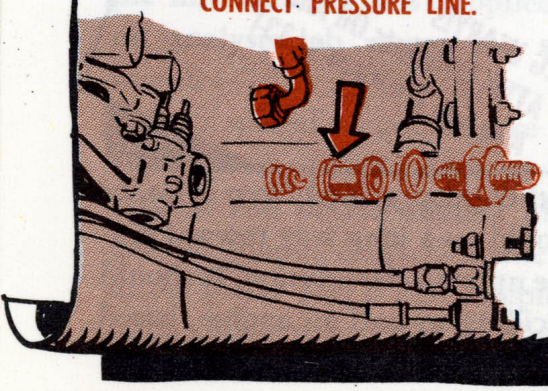


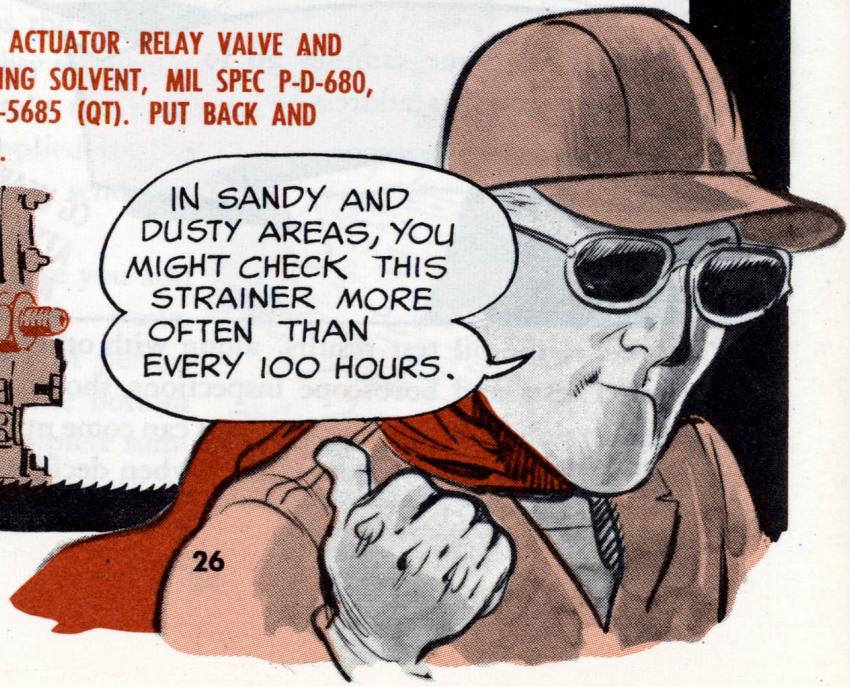
1 UNSCREW PRESSURE HOSE AT ACTUATOR RELAY VALVE. CHECK IF LINE IS FREE FROM ANY RESTRICTIONS.



2 BLOW DRY, FILTERED COMPRESSED AIR THROUGH LINE TO CLEAR PORT IN THE DIFFUSER.

3 TAKE STRAINER OUT OF ACTUATOR RELAY VALVE AND CLEAN WITH DRY CLEANING SOLVENT, MIL SPEC P-D-680, TYPE 1, FSN 6850-664-5685 (QT). PUT BACK AND CONNECT PRESSURE LINE.



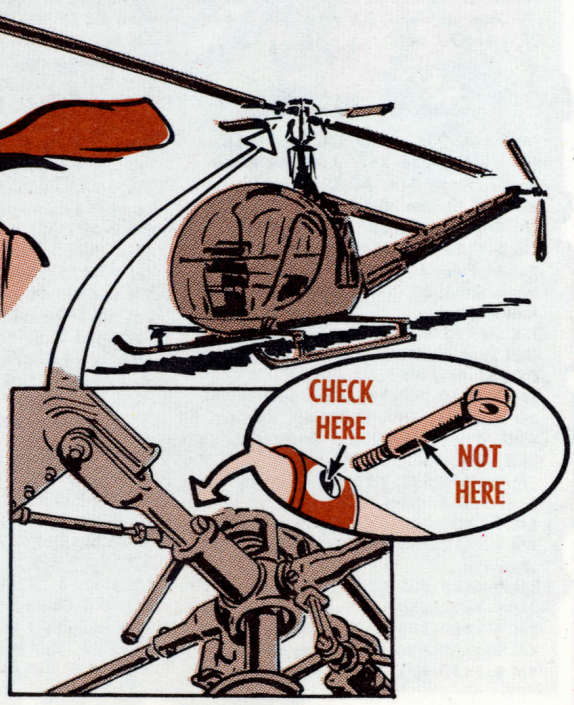


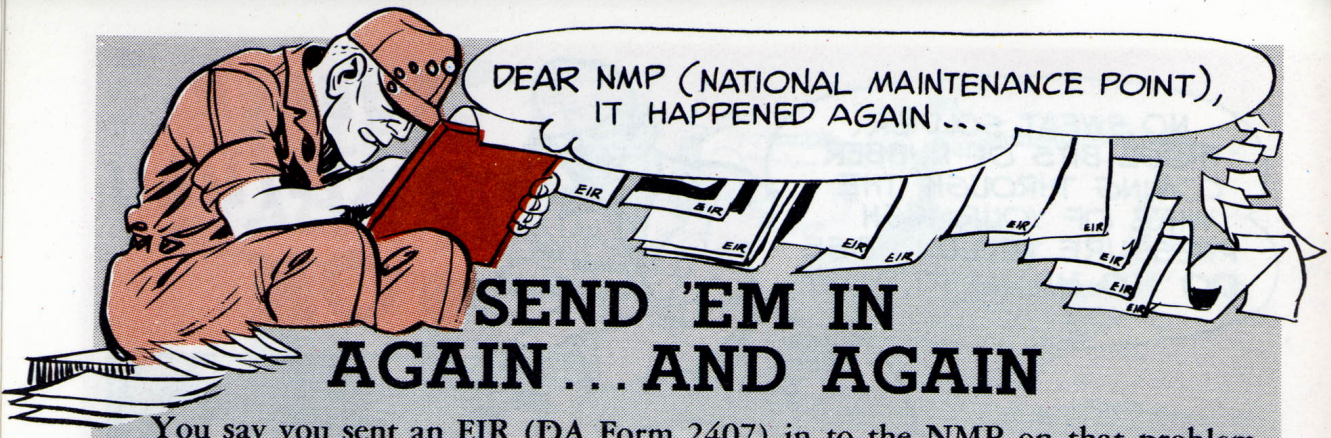
RUBBER STRIKE-THRU OK

This wire cover is applied with tension which forces some of the rubber bonding up thru the wire strands. You may find more rubber showing as fluids surge thru your bird. This strike-thru gives you a better cover bond and acts as a built-in separator for the wire braid.

EYE FORK — NOT PIN

When you Raven (OH-23) types run a dye penetrant check on the main rotor fork every second periodic, as called for in sequence 2.33 of TM-55-1520-206-20 PMP (15 Dec 65), keep this in mind: When you take the retention pin from the outboard T-T bar you check the milled area in and around the fork pin bore — not the pin.





SEND 'EM IN AGAIN . . . AND AGAIN

You say you sent an EIR (DA Form 2407) in to the NMP on that problem you have on your equipment?

Fine and dandy!

And now you have more of the same problem. What do you do? You don't rest on your laurels just because you sent in that one EIR.

Send in a new one.

And if it happens again, send in another one. And more . . . as long as the problem keeps repeating. Anytime an equipment failure shows up, tell the design guys with an EIR.

Of course, you keep a sharp lookout for solutions to your problems in the EIR Digests on your equipment.

A selected list of recent publications of interest to Organizational Maintenance Personnel. This is a list compiled from recent Adjutant General's Distribution Center Bulletins. For complete details see DA Pam 310-4 and Ch 2 (19 Aug 66) and DA Pam 310-6 and Ch 1 (1 Oct 66).

TECHNICAL MANUALS

TM 1-10H-23C-4-20P, C4, Nov, OH-23.
TM 5-4120-216-25P, Aug, Air Conditioner: Floor Mtd; Air Cooled; 60,000 BTU/HR Carrier Mdl CE-60C-60.
TM 5-4120 223-25P, Sep, Sergeant.
TM 5-4120-258-15, Aug, Air Conditioner, Floor Mtd; Air Cooled, Elec Motor Drvn, 60,000 BTUH, Ellis & Watts Mdl A-62.
TM 5-6115-331-15, Sep, Gen Set, Gas Eng: 18.9-KW, DC, Hol-Gar Mdl CE-856-PM/WK1.
TM 5-6230-200-15, Aug, Searchlight, 30 Inch, DC, 80V, 200 Amp, Carbon ARC, Wheel Mtd Strong Electric Co. Mdl 78001-1.
TM 9-1300-203, C15, Oct, Ammo, Tank and Artillery.
TM 9-1400-382-12, Sep, Pershing.
TM 9-1410-250-15P/1/1, Aug, Nike-Herc.
TM 9-1425-300-25P, Oct, Sergeant.
TM 9-1430-250-15, Sep, Nike-Herc.
TM 9-1430-375-12/1, Oct, Pershing.
TM 9-1430-510-12/1, Aug, Hawk.
TM 9-1430-512-15P/2, Aug, Hawk.
TM 9-2320-209-10, C2, Oct, 2½ Ton G742-Series Trucks.
TM 9-2320-222-10, C1, Oct, Recovery Veh, Med, M88.
TM 9-2320-222-35/2, C1, Aug, Dir/Gen Spt, Recov Veh, Full Trkd, Med M88.
TM 9-2320-224-10, C4, Sep, Carrier, Cmd and Recon, Armored M114/M114A1.
TM 9-2330-223-14, Jul, Trailer, Rocket, M329A1.
TM 9-2330-234-24P, Jul, Chassis, Trailer: M454.
TM 9-2350-222-10, C3, Oct, Veh, Combat Engineer, M728 (T118E1).
TM 9-4935-253-15P/2/1, Aug, Nike-Herc.
TM 9-4935-304-15P/2, Aug, Sergeant.
TM 9-4935-509-15P/1, Aug, Hawk.
TM 10-3930-243-20P, Oct, Truck, Lift, Fork, Dsl Eng: Rough Terrain, 10,000 Lb Cap, Pettibone-Mulliken Mdl RTL 10, Army Mdl MHE 199.

LUBRICATION ORDERS

LO 5-3810-232-12-1, & -12-2, Sep, Crane, 20 Ton, American Hoist and Derrick Mdl 2380.
LO 5-4310-260-15, Sep, Compressor, Recip, Air: GED, Trailer Mtd: 15 CFM 175 PSI.
LO 5-6115-351-15, Sep, Gen Set, Gas Eng, Air Cooled, 7.5KW, 28V, DC, 2 Wire; Wheel-Mtd; Winterized, (Atlas Polar Co, Ltd, Mdl MC 111 W/Eng Wisconsin Mdl Eng MVH4D).
LO 10-3930-242-12-1, & -12-2, Oct, Truck, Lift, Fork, Dsl Eng, 6,000-cap, Anthony Mdl MLT6.

MODIFICATION WORK ORDERS

MWO 9-1015-230-30/1, Oct, Dir, Gen Spt, Howitzer, M108.
MWO 9-1055-212-10/1, Oct, Little John.
MWO 9-1240-258-30/3, Oct, Tanks, Combat, Gun, M48A2, M48A2C, M60, M60A1.
MWO 9-1420-262-40/1, Oct, Tanks, Combat, Gun, M48A3, M60, M60A1.
MWO 9-2350-217-20/8, Nov, Howitzer, Med, SP, M109.
MWO 10-1670-206-20/3, Nov, Parachute, Personnel.
MWO 55-1510-203-20/3, Nov, U-6.
MWO 55-1510-204-20/4, Nov, OV-1.
MWO 55-1510-206-20/3, C2, Nov, CV-2.
MWO 55-1510-206-34/62, C2, Nov, CV-2.
MWO 55-1520-202-34/31, & -34/33, Nov, CH-34.
MWO 55-1520-206-34/14, C2, Nov, OH-23.
MWO 55-1520-209-20/52, Nov, CH-47.
MWO 55-1520-209-30/31, Nov, CH-47.
MWO 55-1520-209-34/107, Nov, CH-47.
MWO 55-1520-209-34/109, Dec, CH-47.
MWO 55-1520-209-34/118, C1, Nov, CH-47.

JOE'S DOPE
DON'T BE A GASS
Oh, I'm wailing The Tale of HERBIE GASS. The boy was right... he was A GAS!!
OH, LIKE HE WAS A GASSER, OL' HERBIE GASS... EVERY ONE IN THE OUTFIT LIKED TO HAVE HIM AROUND, HEP HAP PZAZZ DOODEEDAYY
CHA'O ONG, HERBIE.
CHOUOI "GRUNTS"
WHEN THE BOYS WERE TIRED
WHEN THE BOYS WERE BLUE.
IT WAS GASS THAT CHEERED
THE MEN RIGHT THRU...
HE DUG THE THINGS THAT
THEY DIG THE MOST

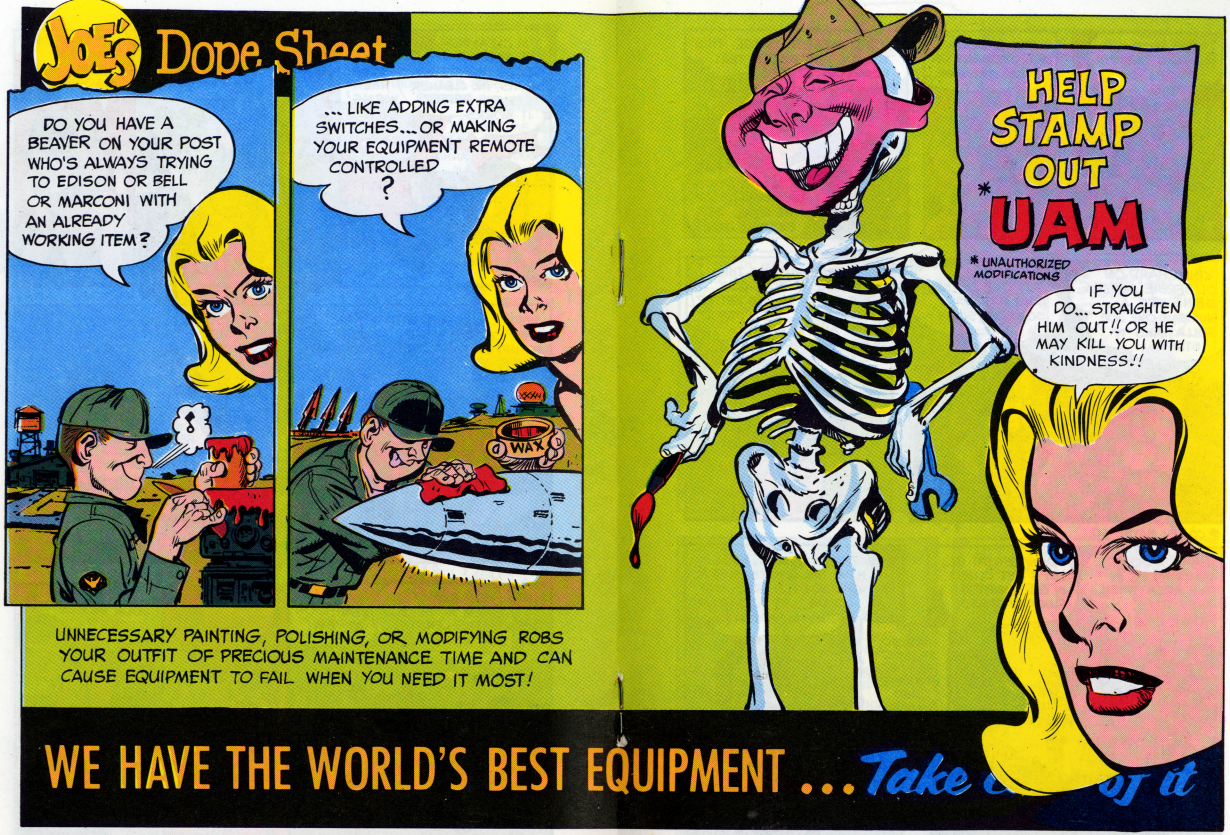
WHERE ARE YOU HEADIN', HERB?... TO SOME Nº 1 CHICK'S HOOTCH??
LATER! NOW, OL' SARGE WANTS MY TECHNICAL ADVICE.
OK, HERB! YOU'RE BOO-COO LATE... THAT COMMO GEAR'S GOT TO BE NO. 1 BY 1645... WE DREW A COUNTER-AMBUSH JOB THIS EVENING
COUNT ME OUT! I'M BUSY... AHAR, HAR, HAR.
HMM... I WONDER WHO THE NUT IS WHO LEFT THESE CAPACITORS LAYING OUT IN THE SUN?
YEOWW
ZAP
GRRRR... GASS! I'LL @☆!!@#₥!!
I ALWAYS KEEP 'EM READY, SARGE.
WOW! OL' HERBIE REALLY SNAGGED THE SARGE... WOT A GASS, MAN! HE'S NUMBAH ONE!
YEAH, BUT ONE O' THESE DAYS... ZAP!
GASS... WHAT ARE YOU DOING WITH THAT STEAM HOSE?

I'M CLEANING THE VEHICLE GOOD... EVERYBODY KNOWS THE CLEANER IT IS THE BETTER IT WORKS.
YA GONNA DRENCH THE WIRING! YOU'LL BE SORRY!
LATER
WHOSE THE ©★!! WOT SCREWED UP MY RADIO! ?#★!!☼ .... GASS C'MERE!!
WOT'S WRONG? "GRINDER". PICKING UP MARS?
HERB ... MESSING WITH THAT COMMO STUFF IS UPPER ECHELON STUFF. Y'COULDA WRECKED IT!
NAW! I JUST FINE TUNED IT...
!!
...THAT AFTERNOON, GASS IS SEEN ACTUALLY DOING PHYSICAL WORK!!
LOOK! IT'S HERBIE POUNDING GROUND STAKES. I DON'T BELIEVE IT!
MAN! YOU REALLY DROVE 'EM IN, HERB... LOOKIT THE LENGTH OF THAT ROD.
HAR, HAR, YEAH! LOOK AT 'EM.
POK
THEY'RE ONLY FOUR INCHES LONG!!

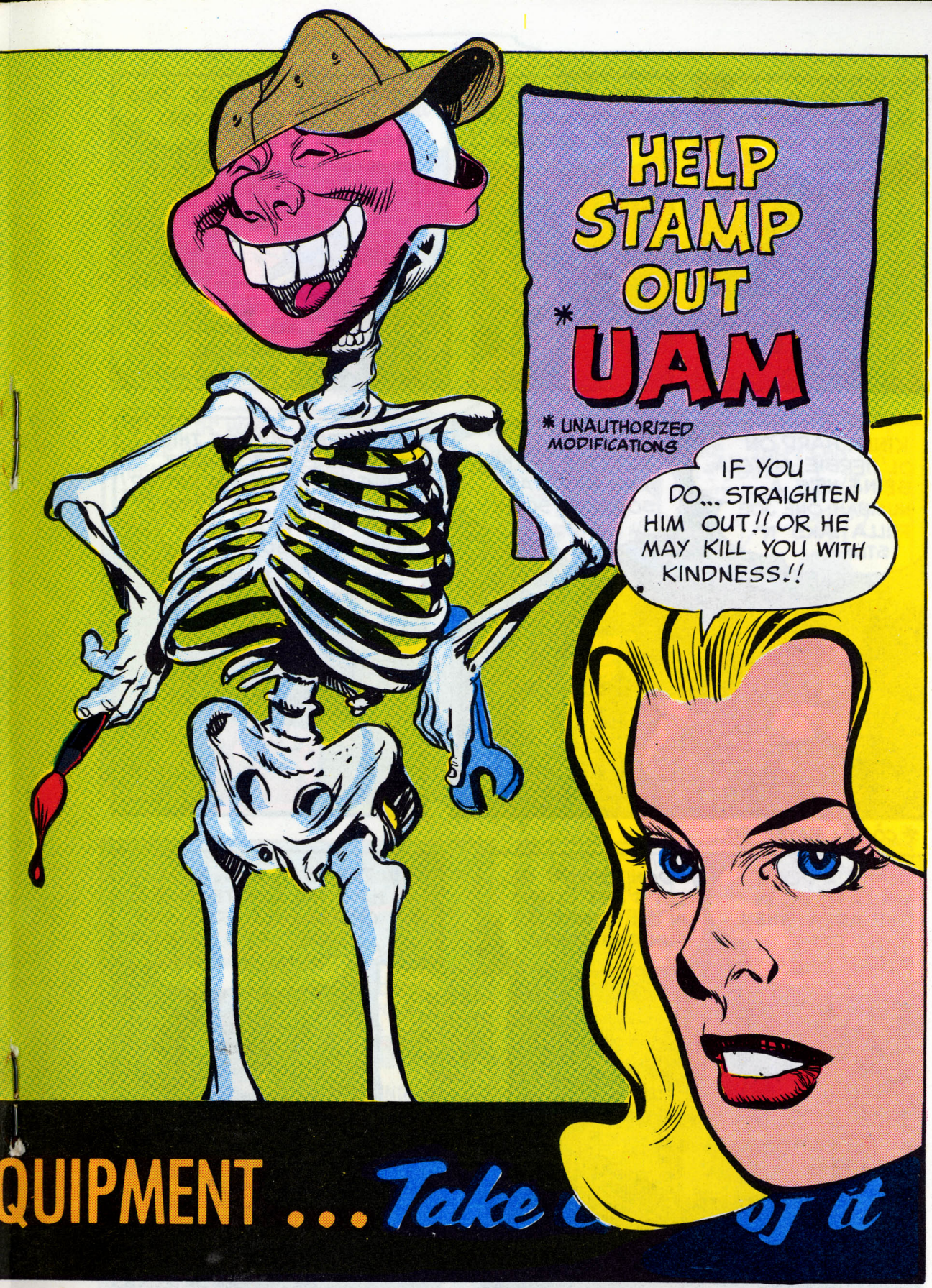
UNNECESSARY PAINTING, POLISHING, OR MODIFYING ROBS YOUR OUTFIT OF PRECIOUS MAINTENANCE TIME AND CAN CAUSE EQUIPMENT TO FAIL WHEN YOU NEED IT MOST!

WE HAVE THE WORLD'S BEST EQ

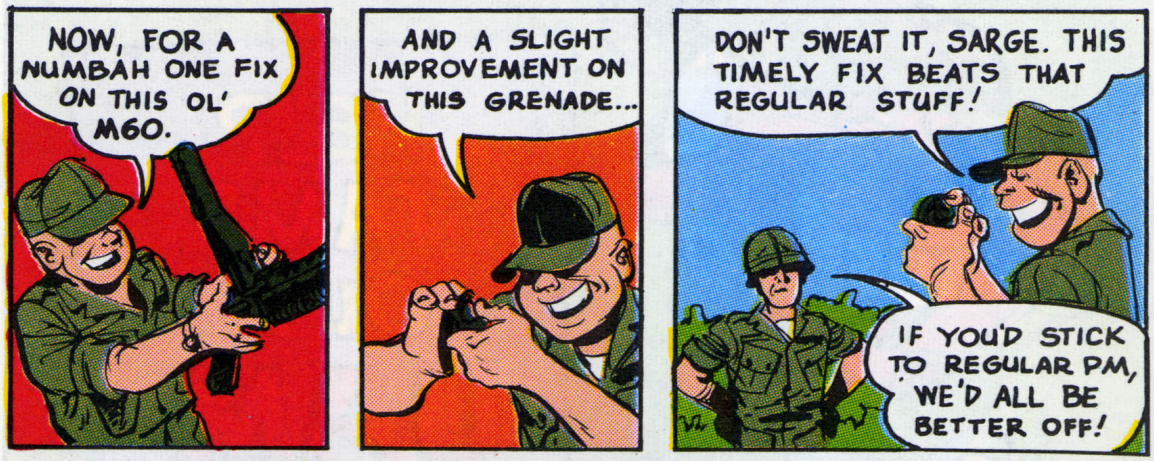
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BU

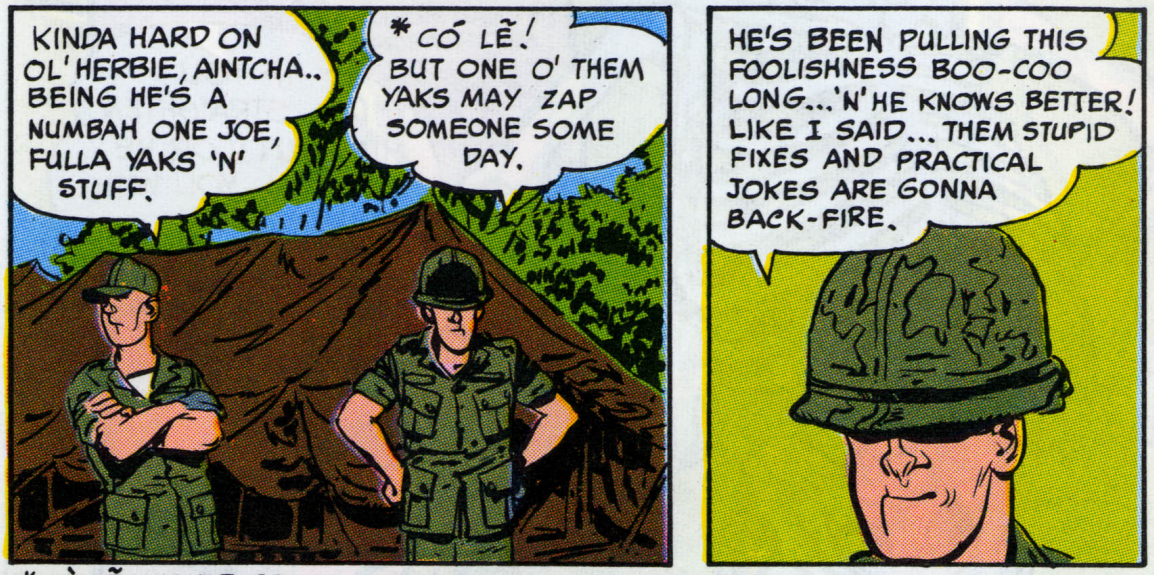


IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.



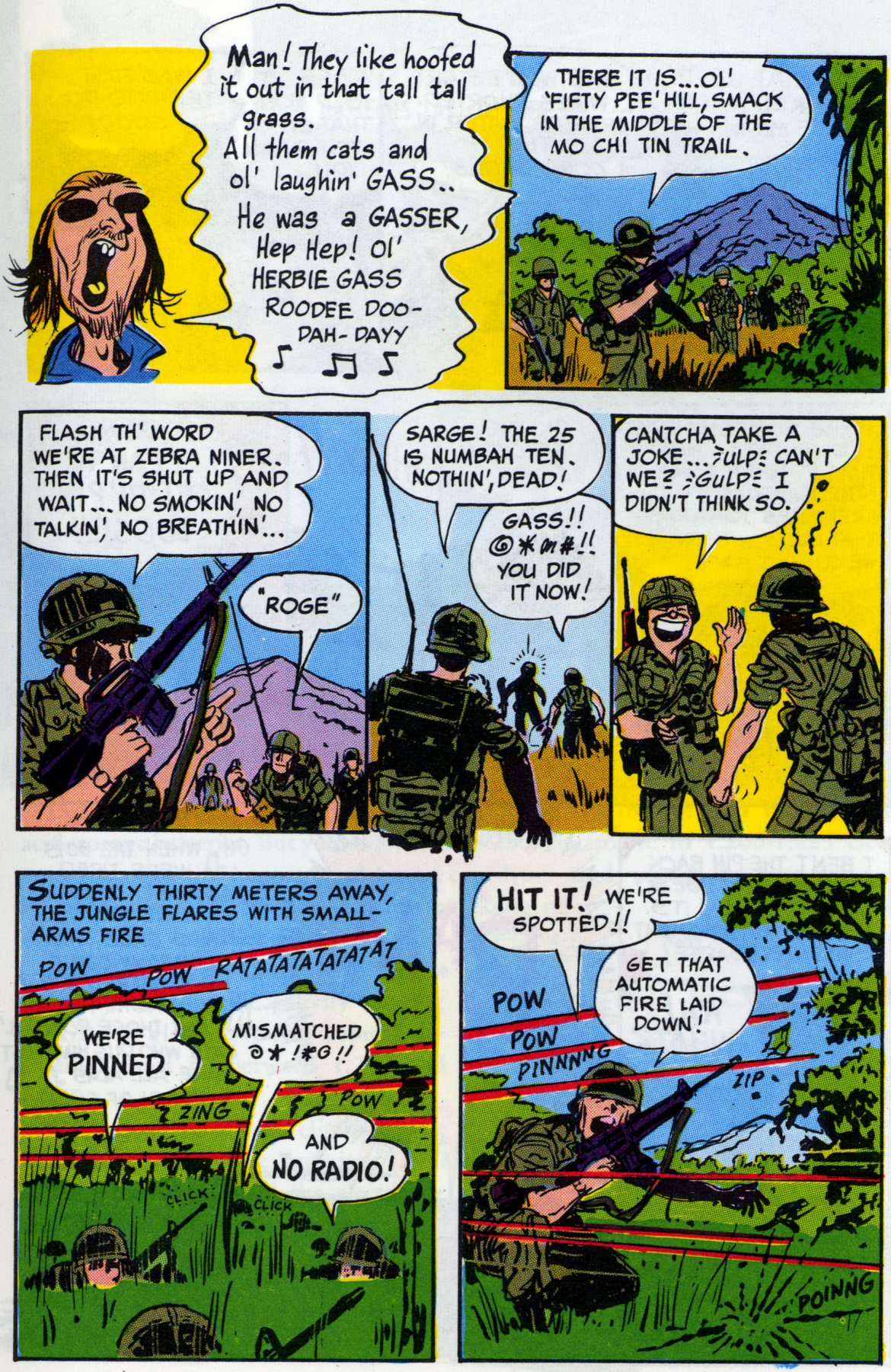
ULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

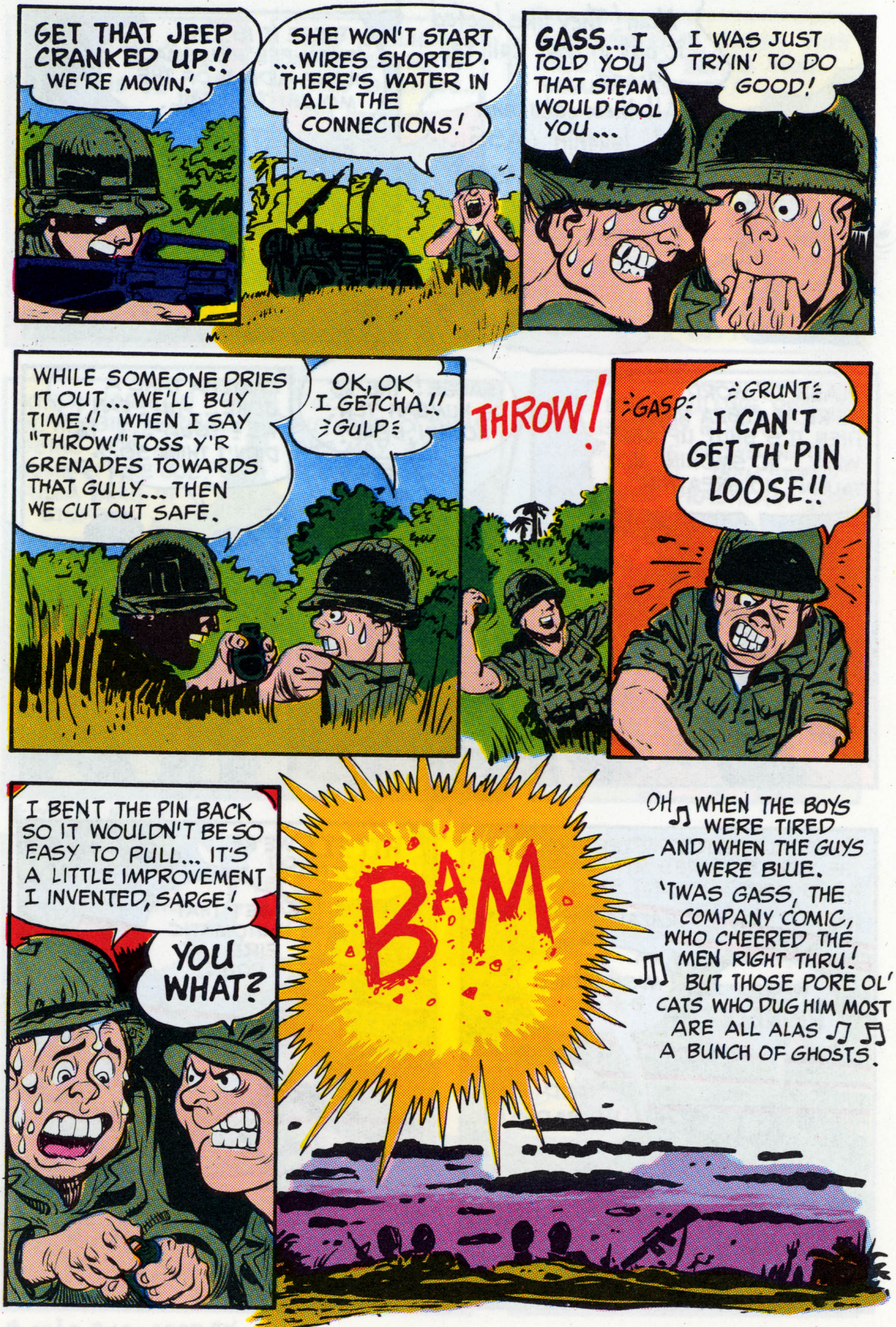




*CÒ LẼ: MAYBE SO..

* CHÀO ÔNG: GOOD BY


Man! They like hoofed it out in that tall tall grass.
All them cats and ol' laughin' GASS..
He was a GASSER, Hep Hep! Ol' HERBIE GASS ROODEE DOO- DAH- DAYY
THERE IT IS...OL' 'FIFTY PEE' HILL, SMACK IN THE MIDDLE OF THE MO CHI TIN TRAIL.
FLASH TH' WORD WE'RE AT ZEBRA NINER. THEN IT'S SHUT UP AND WAIT... NO SMOKIN', NO TALKIN', NO BREATHIN'...
"ROGE"
SARGE! THE 25 IS NUMBAH TEN. NOTHIN', DEAD!
GASS!! @*@#!! YOU DID IT NOW!
CANTCHA TAKE A JOKE... ?ULP? CAN'T WE? ?GULP? I DIDN'T THINK SO.
SUDDENLY THIRTY METERS AWAY, THE JUNGLE FLARES WITH SMALL-ARMS FIRE
POW
POW
RATATATATATATAT
WE'RE PINNED.
MISMATCHED @*!#G!!
ZING
POW
AND NO RADIO!
CLICK
CLICK
HIT IT! WE'RE SPOTTED!!
GET THAT AUTOMATIC FIRE LAID DOWN!
POW
POW
PINNNNG
ZIP
POINNG

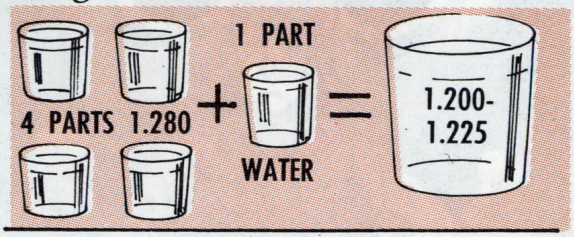

GET THAT JEEP CRANKED UP!! WE'RE MOVIN!
SHE WON'T START ...WIRES SHORTED. THERE'S WATER IN ALL THE CONNECTIONS!
GASS... I TOLD YOU THAT STEAM WOULD FOOL YOU...
I WAS JUST TRYIN' TO DO GOOD!
WHILE SOMEONE DRIES IT OUT... WE'LL BUY TIME!! WHEN I SAY "THROW!" TOSS Y'R GRENADES TOWARDS THAT GULLY... THEN WE CUT OUT SAFE.
OK, OK I GETCHA!! GULP
THROW!
GASP
GRUNT
I CAN'T GET TH' PIN LOOSE!!
I BENT THE PIN BACK SO IT WOULDN'T BE SO EASY TO PULL... IT'S A LITTLE IMPROVEMENT I INVENTED, SARGE!
YOU WHAT?
BAM
OH ♫ WHEN THE BOYS WERE TIRED AND WHEN THE GUYS WERE BLUE. 'TWAS GASS, THE COMPANY COMIC, WHO CHEERED THE MEN RIGHT THRU! ♫ BUT THOSE PORE OL' CATS WHO DUG HIM MOST ARE ALL ALAS ♫ ♫ A BUNCH OF GHOSTS.

Life in the tropics is rough on lead-acid storage batteries. But you can make your battery's life happier and longer by operating it on weaker electrolyte than it needs in cooler places.

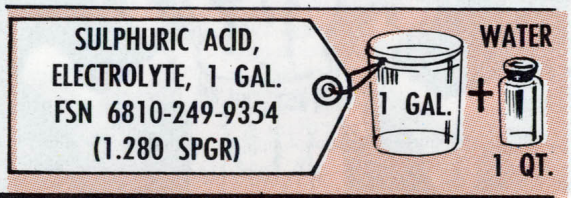
TM 9-6140-200-15 (Jul 58), para 37b, says the specific gravity reading (SPGR) of electrolyte for tropical operations must be between 1.200 and 1.225.

Coming from a cool climate, your batteries may now be carrying 1.280 SPGR electrolyte. And the electrolyte you get for activating new, dry-charged batteries is 1.280 SPGR.

So what's the formula for diluting 1.280 electrolyte to 1.200-1.225 electrolyte? And what's the best way of doing it?



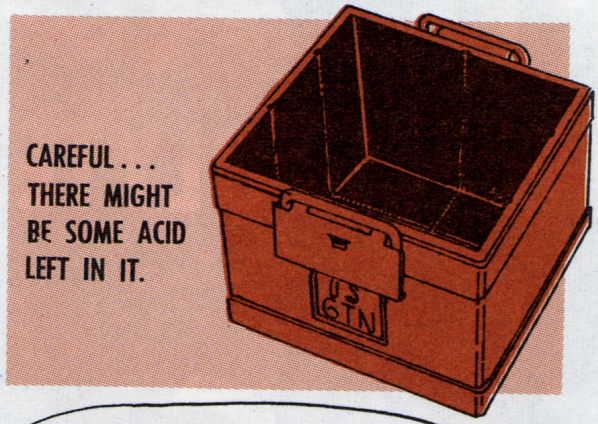
SAME AS:

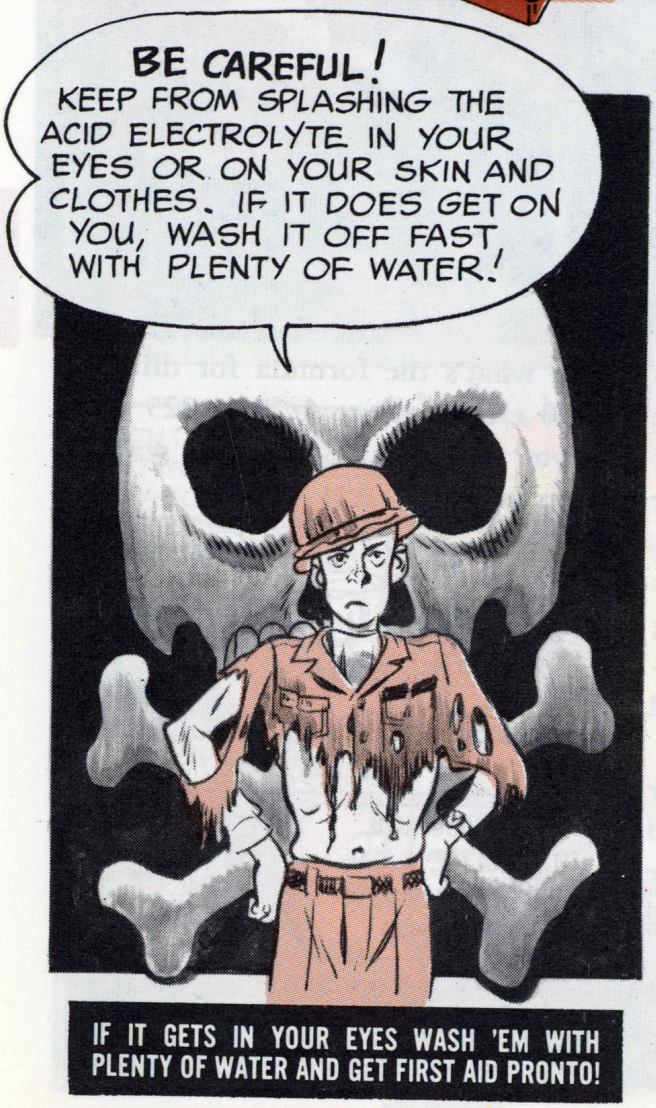


REMEMBER — ALWAYS POUR ELECTROLYTE **INTO** WATER AND NEVER WATER INTO ELECTROLYTE.

PS MORE

For mixing, use a clean container made of glass, heavy plastic or hard rubber. A handy mixing tub can be made from a discarded 6TN battery — take the top off, remove the guts and knock out the partitions.

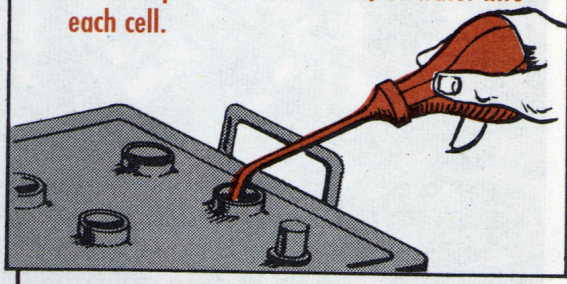




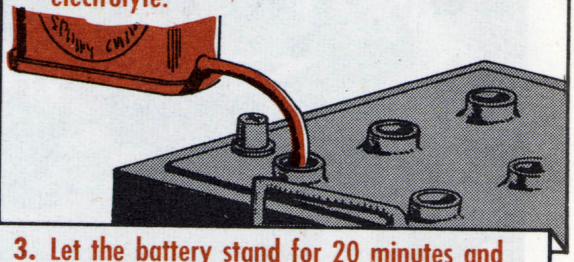
ACTIVATING NEW BATTERIES

Another method of mixing, when you're activating new, dry-charged 6TN batteries, is:

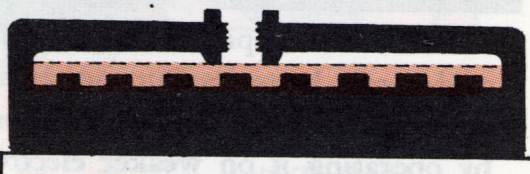
1. Pour ½ pint (8 fluid ounces) of water into each cell.



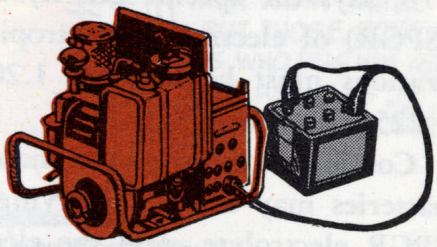
2. Fill all cells to the proper level with 1.280 electrolyte.



3. Let the battery stand for 20 minutes and add more electrolyte if it's needed to come up to the proper level.

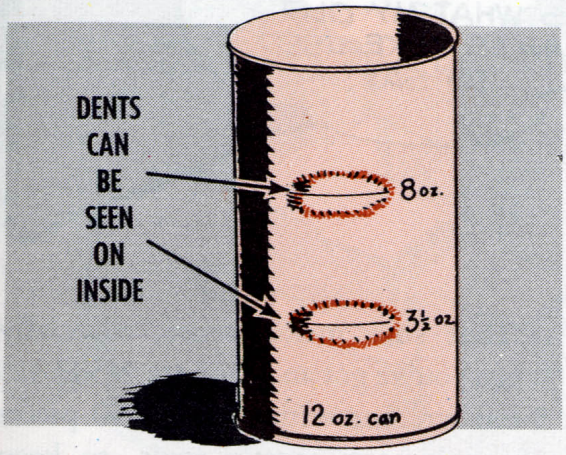


4. Give the battery its initial charge before putting it into service, as explained in Ch 1 (Jan 62) to TM 9-6140-200-15.



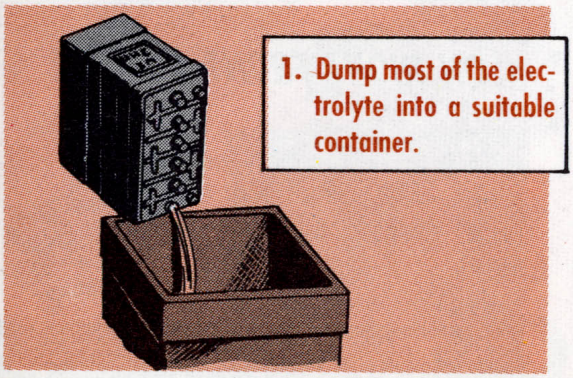
For new, dry-charged 2HN batteries you use the same method except you put only 3½ fluid ounces (a shade under ¼ pint) of water into each cell before adding 1.280 electrolyte.

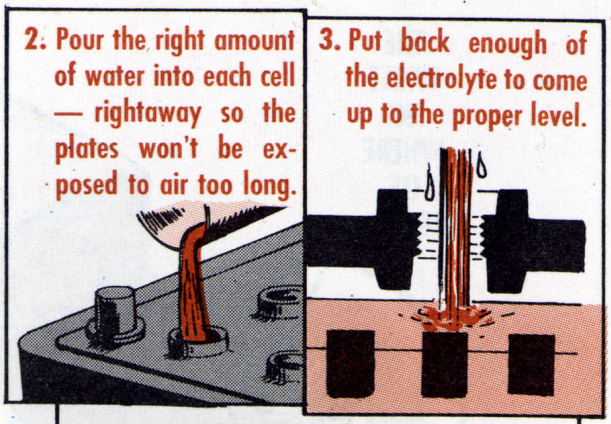
A standard 12-oz soft-drink can, makes a good measure for water — but water only, not electrolyte. Mark off a clean can into thirds — ⅔ of a can for 8 ounces and a little under ⅓ of a can for 3½ ounces. (With an inside can length of 4½ inches, 3 inches equals 8 ounces and 1-5/16 inches equals 3½ ounces.) A light tap with a tool on these marks will make slight dents that can be seen on the inside of the can for accurate measurement.



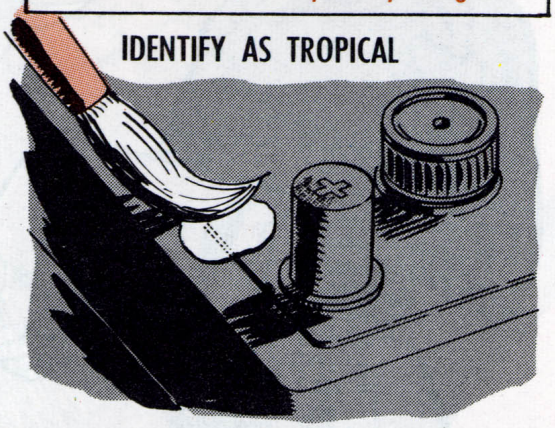
BATTERIES IN SERVICE

Electrolyte already in a battery can be changed from 1.280 SPGR to 1.200-1.225 SPGR by replacing some of the electrolyte with water (8 ounces for 6TN and 3½ ounces for 2HN). This should be done only with a battery that's in top-notch condition and fully charged.

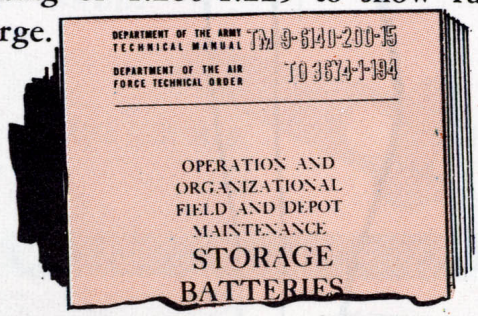




4. Charge the battery until 3 specific gravity readings, taken at 30-minute intervals, show that the battery's fully charged.



Paint a 1-in white spot near the positive terminal on the top of a battery that's carrying 1.200-1.225 SPGR electrolyte for service in the tropics. Besides identifying the battery, this will be a reminder that future specific gravity checks call for a temperature-corrected reading of 1.200-1.225 to show full charge.

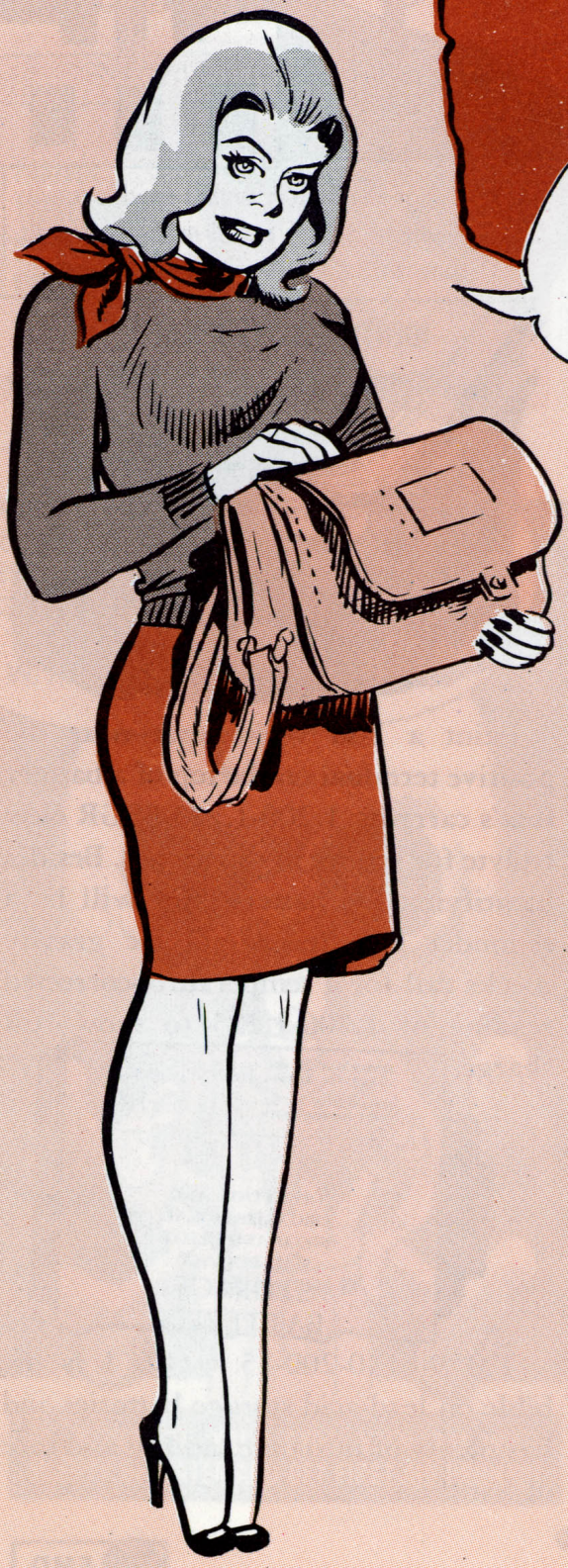


TM 9-6140-200-15 w/Ch 1 is the bible on lead-acid storage batteries and has plenty of info on handling and care of batteries.

END

THE WHAT 'N' WHERE OF YOUR...

M543 WRECKER

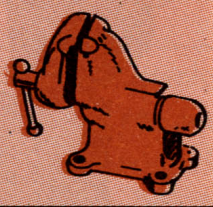


That sure makes sense, especially when you've got an M543 (or M543A2) 5-ton wrecker with more'n 150 pieces of equipment, mostly tools, to keep track of.

You're ready to handle just about any recovery job—if you know **what** you've got and **where** it is. So, to make sure, here's all the stuff you should have aboard—remember, tho, that some items may not look exactly like what's in the pictures because of comin' from different manufacturers:

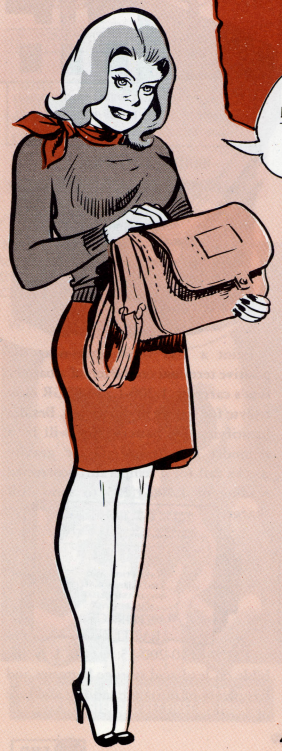
ON RIGHT FRONT BUMPER

1 — VISE, bench and pipe, swv-base, 5-in jaw width



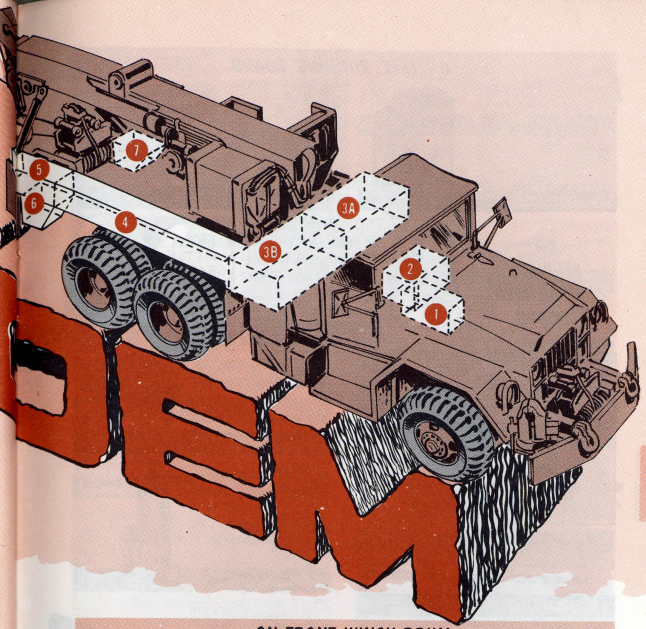
FSN 5120-243-9072

THE WHAT 'N' WHERE OF YOUR...



M543 WRECKER

"A TOOL FOR EVERY JOB ... A PLACE FOR EVERY TOOL... EVERY TOOL IN ITS PLACE"... IS WHAT MY OLD UNCLE ZEKE USED TO SAY!



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You're ready to handle just about any recovery job—if you know what you've got and where it is. So, to make sure, here's all the stuff you should have aboard—remember, tho, that some items may not look exactly like what's in the pictures because of comin' from different manufacturers:

ON RIGHT FRONT BUMPER

1 — VISE, bench and pipe, swv-base, 5-in jaw width

FSN 5120-243-9072

ON FRONT WINCH DRUM

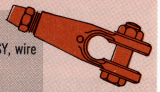
1 — CABLE ASSY, winch, w/clevis and chain.

COMPOSED OF:

1 — CHAIN ASSY, winch, ⅝-in link, 6 feet long, w/2 cplg links and hook

FSN 2540-771-7032

1 — CLEVIS ASSY, wire rope

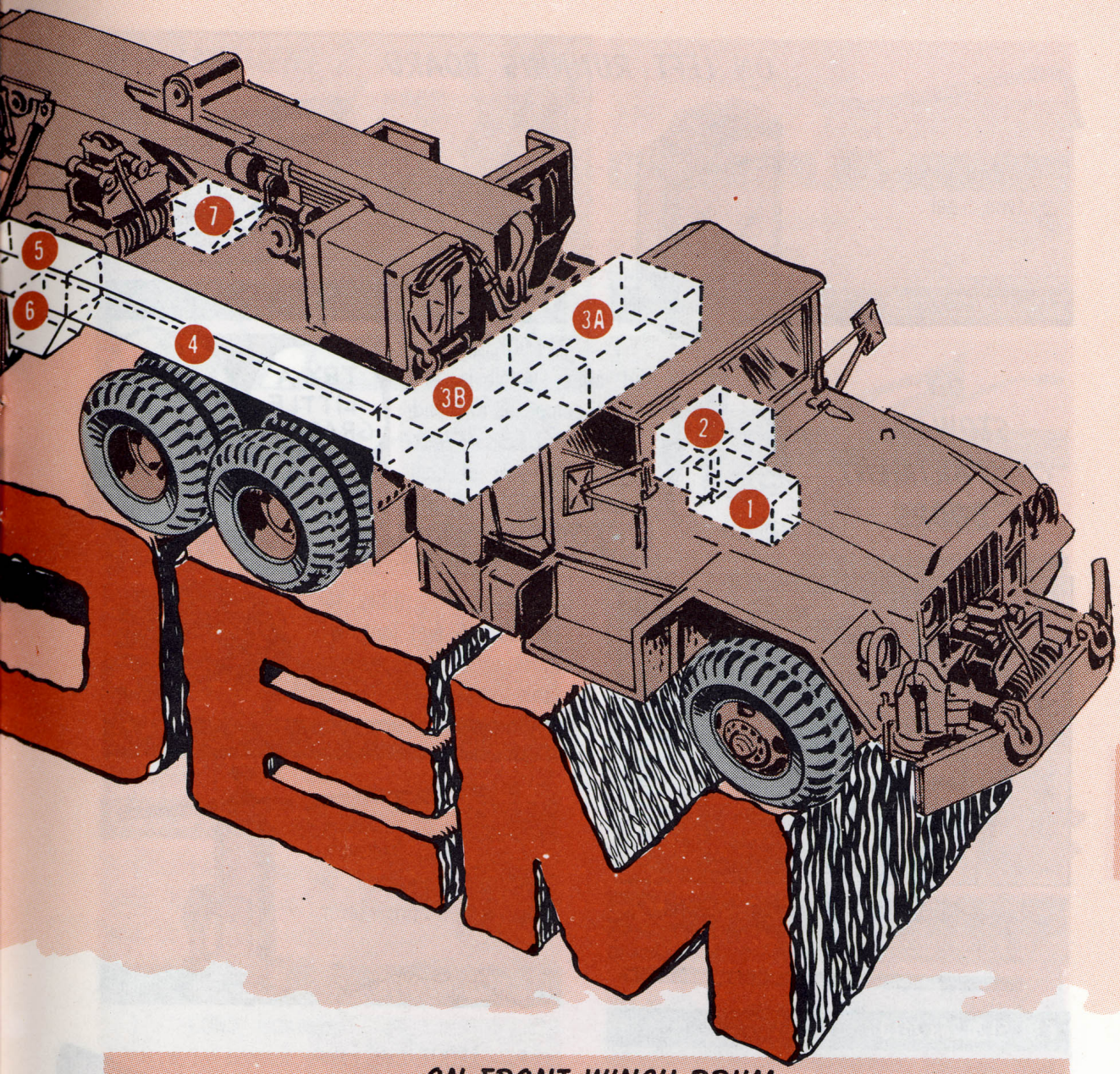


FSN 4030-262-3154

1 — ROPE, WIRE, ⅝-in dia, 280 feet long

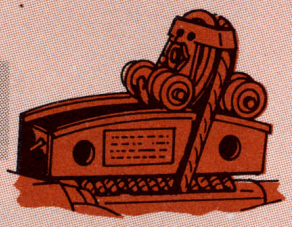
FSN 4010-274-6817

MORE



ON FRONT WINCH DRUM

1 — CABLE ASSY, winch, w/clevis and chain.

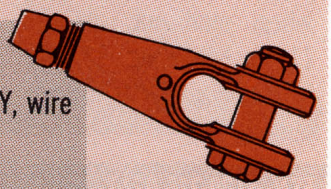


COMPOSED OF:

1 — CHAIN ASSY, winch, 5/8-in link, 6 feet long, w/2 cplg links and hook

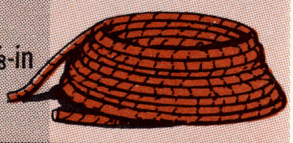
FSN 2540-771-7032

1 — CLEVIS ASSY, wire rope



FSN 4030-262-3154

1 — ROPE, WIRE, 5/8-in dia, 280 feet long

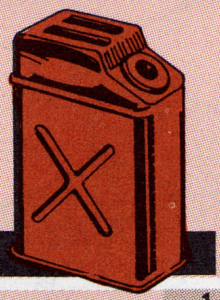


FSN 4010-274-6817

MORE

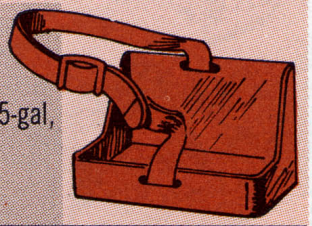
ON LEFT RUNNING BOARD

1 — CAN, gasoline, military type, 5-gal



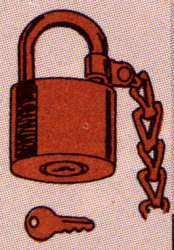
FSN 7240-222-3088

(in BRACKET, can, 5-gal, w/strap



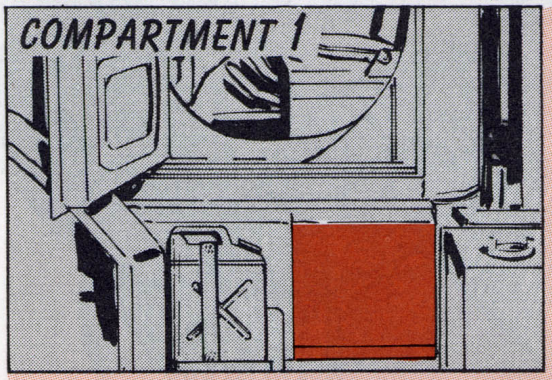
FSN 2590-473-6331

ON STOWAGE COMPARTMENT DOORS



1 — PADLOCK SET, keyed alike, w/clevis and chain, composed of 5 padlocks and 7 keys, (1 tack-welded to door of compartment 1, 3A, 7, 6, 3B)

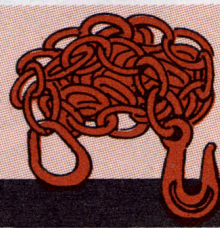
FSN 5340-682-1504



1 — HANDLE, bar, wheel stud nut wrench, ¾-in dia, 30 inches long

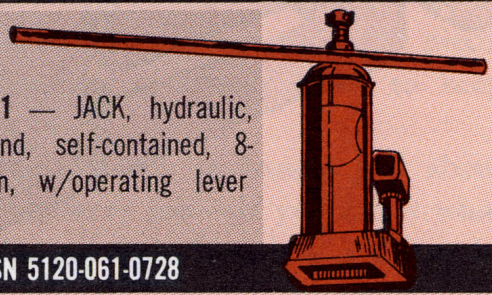
FSN 5120-243-2419

1 — CHAIN, utility, ⅝-in link, 16 feet long, w/ hook, w/2 pear shape cplg end links



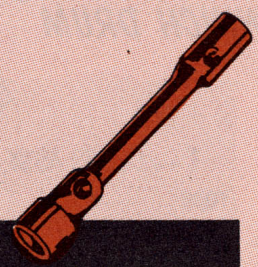
FSN 4010-473-6166

1 — JACK, hydraulic, hand, self-contained, 8-ton, w/operating lever



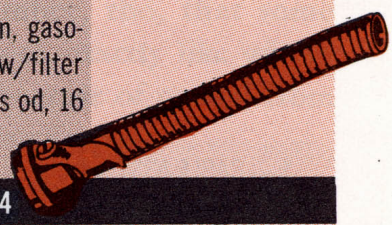
FSN 5120-061-0728

1 — WRENCH, socket, wheel stud nut, dbl-hd, 1½-in hex opng, 13/16-in sq opng, 17-19 inches long



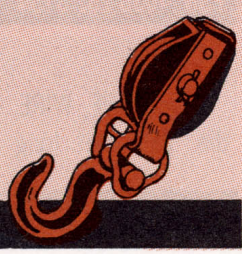
FSN 5120-316-9217

1 — SPOUT, can, gasoline, flexible, w/filter screen, 2¼ inches od, 16 inches long

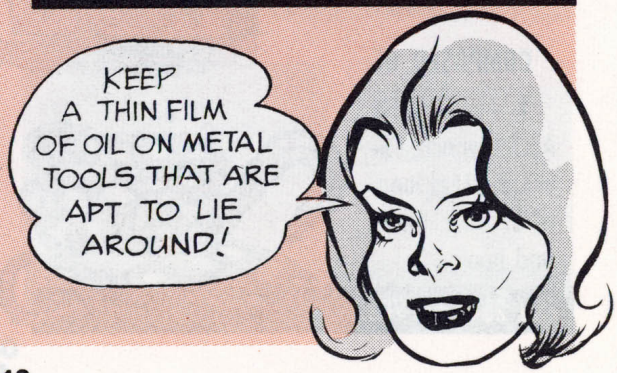


FSN 7240-177-6154

1 — BLOCK, rigging, wire rope, sgl 8-in sheave, w/swv hook, ⅝-in dia rope, 10-ton working load

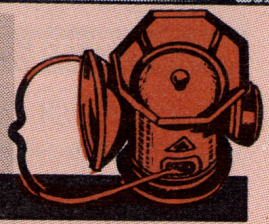


FSN 3940-630-9931



1 — LANTERN, electric, hand, 6-volt, w/2 lamps

FSN-6230-498-9408



2 — BATTERY, dry, 6-volt, (1 in lantern)

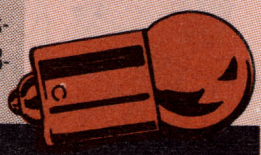
FSN 6135-050-3280

1 — CORD, light, inspection, 25 feet long

FSN 6150-378-2055

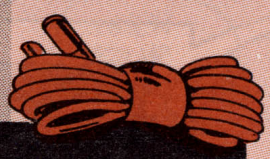
1 — LAMP, incandescent, bayonet base, 28-volt, (in inspection light)

FSN 6240-044-6914



1 — CORD, extension light, w/sgl-contact plug and socket, 25 feet long

FSN 6230-548-0387

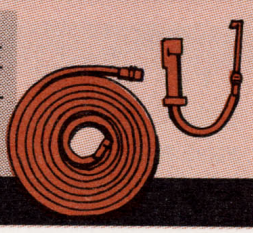


1 — EXTENSION, cable, electric, 24-volt, 20 feet long, w/coupling (slave)

FSN 4910-474-9135

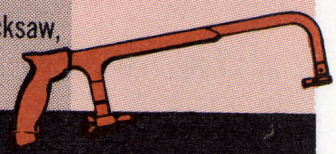
1 — GAGE AND HOSE ASSY, tire inflation, self-contained, 30 feet long

FSN 4910-777-2943



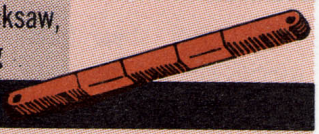
1 — FRAME, hacksaw, hand, adjustable

FSN 5110-223-4971



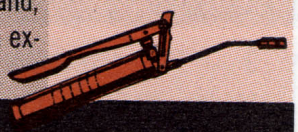
12 — BLADE, hacksaw, hand, 12 inches long

FSN 5110-237-8106



1 — GREASE GUN, hand, lever operated, w/6-in extension

FSN 4930-268-9614



1 — ADAPTER, grease gun, rigid, 6 inches long

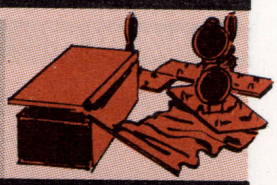
FSN 4930-387-9551

1 — EXTENSION, grease gun, flex hose, 12 inches long

FSN 4930-288-1511

1 — FLARE KIT, reflector type, w/flags, reflectors, instructions and metal box

FSN 9905-449-7161



1 — BAG, tool, canvas, 10 x 20 inches, w/flap

FSN 5140-772-4142

IN TOOL BAG:

2 — LINK, chain, repair (front winch), 5/8-in

FSN 4010-542-4436

3 — PIN, shear (front winch), 3/8-in dia, 2 5/8 inches long, aluminum

FSN 5315-740-9348

6 — PIN, cotter (for shear pin), split, 3/4-in

FSN 5315-012-1222

P.S. MORE

(Continued) *COMPARTMENT 2* IN TOOL BAG:

2 — LINK, chain, repair (rear winch), ¾-in

FSN 4010-274-5170

3 — PIN, shear (rear winch), grooved, hd, ⅝-in dia, 3½ inches long

FSN 5315-282-2583

3 — PIN, cotter (for shear pin), split, 1-in

FSN 5315-013-7185

1 — PLIERS, slip joint, w/cutter, 10 inches long

FSN 5120-223-7398

1 — SCREWDRIVER, cross tip, stght, Phillips, plastic hdl, pt No. 2, 7½ inches long

FSN 5120-234-8913

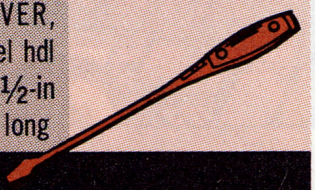
1 — SCREWDRIVER, cross tip, stght, Phillips, plastic hdl, pt No. 3, 10¼ inches long

FSN 5120-234-8912

1 — SCREWDRIVER, flat tip, common, plastic hdl, ¼-in wide tip, 7¾ inches long

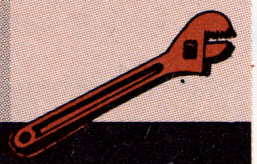
FSN 5120-222-8852

1 — SCREWDRIVER, flat tip, hv duty, steel hdl w/wood inserts, ½-in wide tip, 9½ inches long



FSN 5120-227-7338

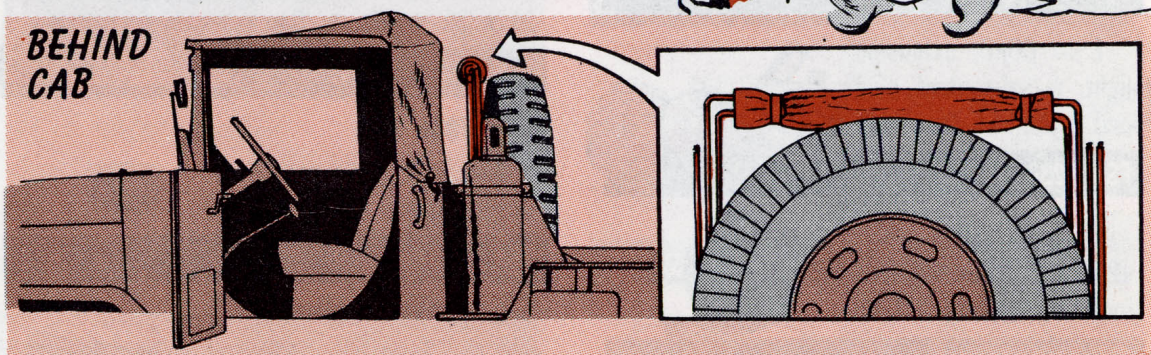
1 — WRENCH, open end, adjustable, sgl head, stght hdl, 12 inches long



FSN 5120-264-3796

1 — WRENCH, plug, stght, bar, sq, ½-in sq plug, 2½ inches long

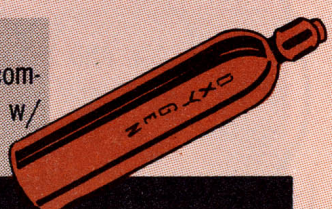
FSN 5120-708-3302



Right side:
1 — CYLINDER, compressed gas, acetylene, w/valve and cap, filled

FSN 6830-264-6751

Left side:
1 — CYLINDER, compressed gas, oxygen, w/valve and cap, filled



FSN 6830-292-0129

(Continued) **COMPARTMENT 2 IN TOOL BAG:**

2 — LINK, chain, repair (rear winch), ¾-in
FSN 4010-274-5170

3 — PIN, shear (rear winch), grooved, hd, ⅝-in dia, 3½ inches long
FSN 5315-282-2583

3 — PIN, cotter (for shear pin), split, 1-in
FSN 5315-013-7185

1 — PLIERS, slip joint, w/cutter, 10 inches long
FSN 5120-223-7398

1 — SCREWDRIVER, cross tip, stght, Phillips, plastic hdl, pt No. 2, 7½ inches long
FSN 5120-234-8913

1 — SCREWDRIVER, cross tip, stght, Phillips, plastic hdl, pt No. 3, 10¼ inches long
FSN 5120-234-8912

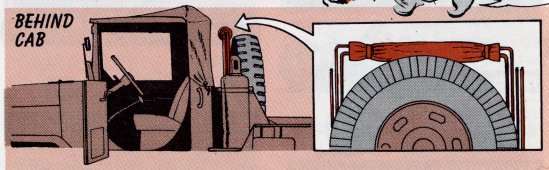
1 — SCREWDRIVER, flat tip, common, plastic hdl, ¼-in wide tip, 7¾ inches long
FSN 5120-222-8852

1 — SCREWDRIVER, flat tip, hv duty, steel hdl w/wood inserts, ½-in wide tip, 9½ inches long
FSN 5120-227-7338

1 — WRENCH, open end, adjustable, sgl head, stght hdl, 12 inches long
FSN 5120-264-3796

1 — WRENCH, plug, stght, bar, sq, ½-in sq plug, 2½ inches long
FSN 5120-708-3302

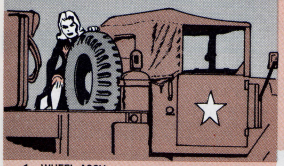
BEHIND CAB



Right side:
1 — CYLINDER, compressed gas, acetylene, w/valve and cap, filled
FSN 6830-264-6751

Left side:
1 — CYLINDER, compressed gas, oxygen, w/valve and cap, filled
FSN 6830-292-0129

SPARE WHEEL WELL



1—WHEEL ASSY, spare, w/tire and tube.
CONSISTING OF:

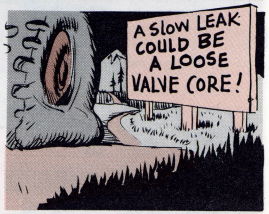
1 — INNER TUBE, pneumatic tire, truck and bus, 11.00-20, w/valve
FSN 2610-051-9450

1 — TIRE, pneumatic, truck and bus, 12 ply, 11.00-20, w/flap, cross country tread
FSN 2610-262-8653

1 — WHEEL ASSY, w/ring
FSN 2530-738-8820

1 — CAP, tire valve, standard bore
FSN 2640-052-0944

1 — VALVE CORE, pneumatic tire, standard bore
FSN 2640-050-1229



2 — CHAIN, utility (1 each side), sgl leg, ¾-in link, 12 feet long, w/grab hook and pear shape coupling link
FSN 4010-449-6573

1 — FRAME, canopy (front), tubular, steel
FSN 2540-860-2356

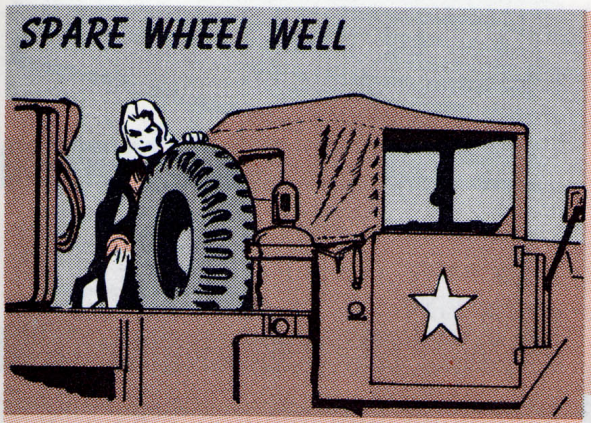
1 — FRAME, canopy (rear), tubular, steel
FSN 2540-860-2357

1 — CANOPY, gondola, canvas
FSN 2540-860-2355

3 — BRACE, gondola top, steel
FSN 2540-860-2358

2 — STRAP, webbing, 1½-inches wide, 24 inches long, w/buckle
FSN 5340-543-3034

MORE



1—WHEEL ASSY, spare, w/tire and tube.

CONSISTING OF:

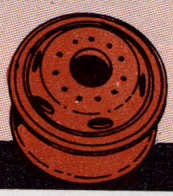
1 — INNER TUBE, pneumatic tire, truck and bus, 11.00-20, w/valve

FSN 2610-051-9450

1 — TIRE, pneumatic, truck and bus, 12 ply, 11.00-20, w/flap, cross country tread

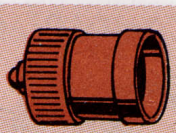
FSN 2610-262-8653

1 — WHEEL ASSY, w/ring



FSN 2530-738-8820

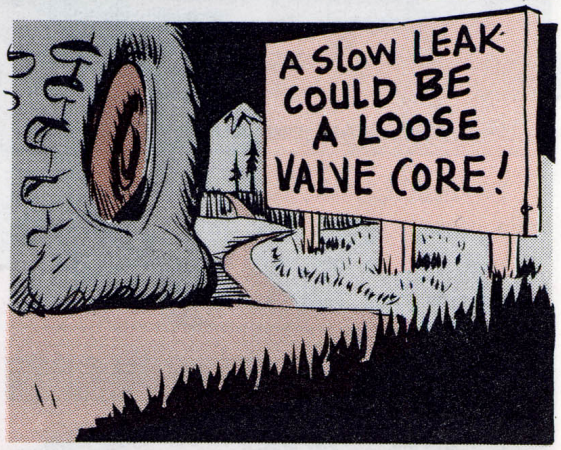
1 — CAP, tire valve, standard bore



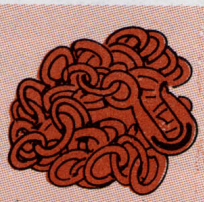
FSN 2640-052-0944

1 — VALVE CORE, pneumatic tire, standard bore

FSN 2640-050-1229

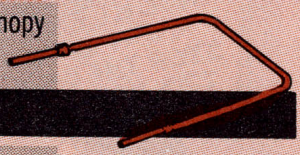


2 — CHAIN, utility (1 each side), sgl leg, ¾-in link, 12 feet long, w/grab hook and pear shape coupling link



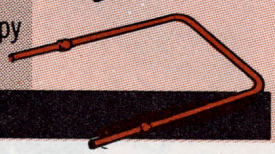
FSN 4010-449-6573

1 — FRAME, canopy (front), tubular, steel



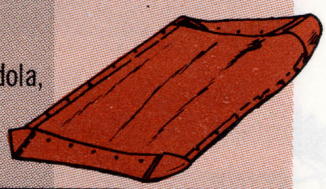
FSN 2540-860-2356

1 — FRAME, canopy (rear), tubular, steel



FSN 2540-860-2357

1 — CANOPY, gondola, canvas



FSN 2540-860-2355

3 — BRACE, gondola top, steel

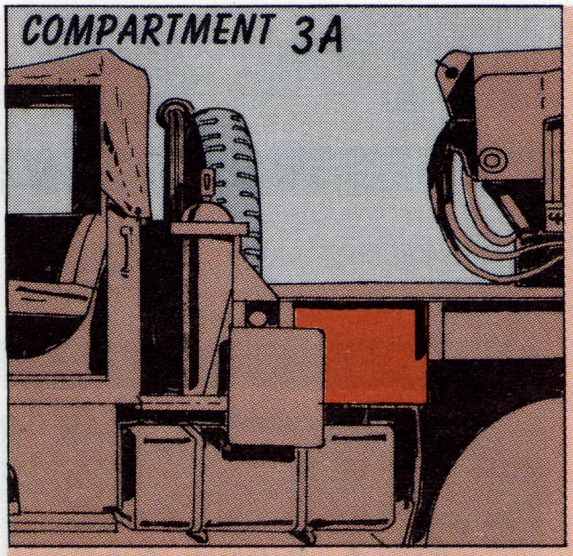
FSN 2540-860-2358

2 — STRAP, webbing, 1½-inches wide, 24 inches long, w/buckle

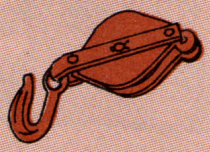
FSN 5340-543-3034

P.S. MORE

COMPARTMENT 3A

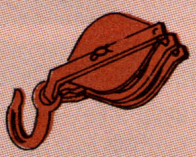


1 — BLOCK, tackle, manila rope, sgl 4¾-in sheave, 1-in dia rope, w/ loose side hook, w/becket



FSN 3940-239-0732

1 — BLOCK, tackle, manila rope, dbl 4¾-in sheave, 1-in dia rope, w/ loose side hook



FSN 3940-223-3821

1 — ROPE, manila, ⅜-in dia, 50 feet long

FSN 4020-238-7734

1 — ROPE, manila, ¾-in dia, 100 feet long

FSN 4020-234-8399

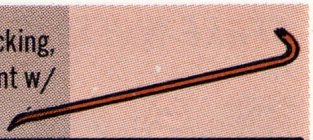
1 — ROPE, manila, 1-in dia, 300 feet long

FSN 4020-231-2581

1 — BAR, pinch, offset and tapered ends, 36 inches long

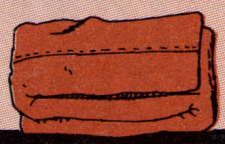
FSN 5120-224-1384

1 — BAR, wrecking, gooseneck, pinch point w/ claw, 36 inches long



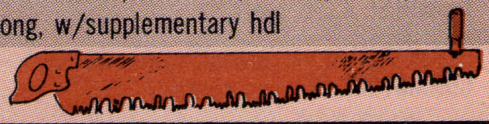
FSN 5120-242-0762

1 — CASE, crosscut saw, cotton duck, 63¾ inches long



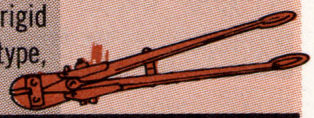
FSN 2540-860-2354

1 — SAW, crosscut (in case), 1-man, 5 feet long, w/supplementary hdl



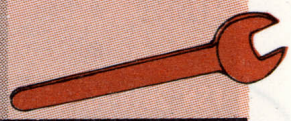
FSN 5110-754-0704

1 — CUTTER, bolt, rigid hd type, clipper cut type, 35 to 39 inches long



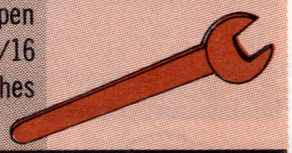
FSN 5110-188-2524

1 — WRENCH, open end, fixed, sgl hd, 1⅝-in opng, 14⅞ inches long



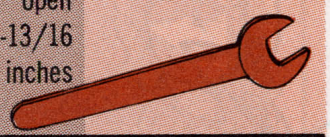
FSN 5120-277-1244

1 — WRENCH, open end, fixed, sgl hd, 1-11/16 inch opng, 14⅞ inches long



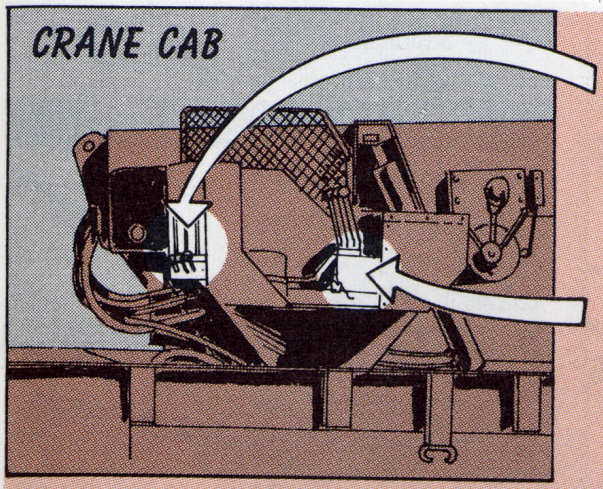
FSN 5120-277-1245

1 — WRENCH, open end, fixed, sgl hd, 1-13/16 inch opng, 16⅜ inches long

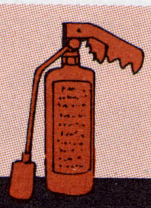


FSN 5120-277-1242

CRANE CAB



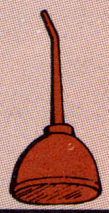
On rear (in brackets):
3—EXTINGUISHER, fire, hand, CF 3 BR (freon), 2¾-lb cap



FSN 4210-555-8837

RIGHT SIDE:

1 — OILER, hand, push bottom type, ½-pt cap

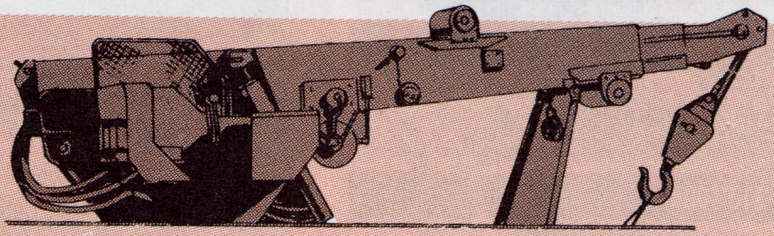


FSN 4930-272-7968

1 — HOLDER, oiler, hand

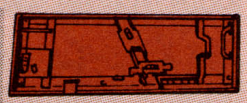
FSN 2590-899-6721

CRANE BOOM



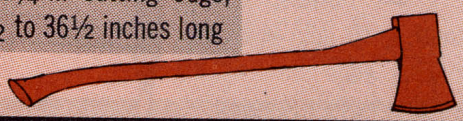
IN BRACKET:

(BRACKET, pioneer tools



FSN 4910-347-5494

1 — AX, single bit, 4-lb hd, 4¾-in cutting edge, 35½ to 36½ inches long



FSN 5110-293-2336

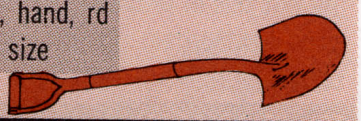
1 — HANDLE, mattockpick, railroad or clay pick, 36 inches long

FSN 5120-254-6618

1 — MATTOCK, pick type, 5-lb

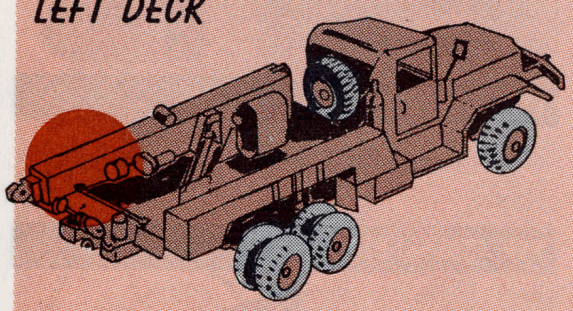
FSN 5120-243-2395

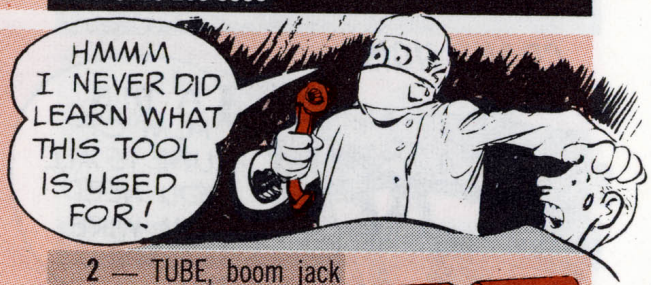
1 — SHOVEL, hand, rd pt, D hdl, short size



FSN 5120-293-3336

LEFT DECK





IN BRACKETS:

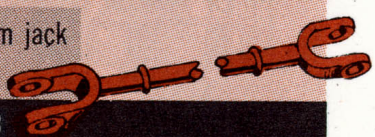
2 — TUBE, boom jack (bottom)

FSN 2540-040-2301

2 — TUBE, boom jack (top)

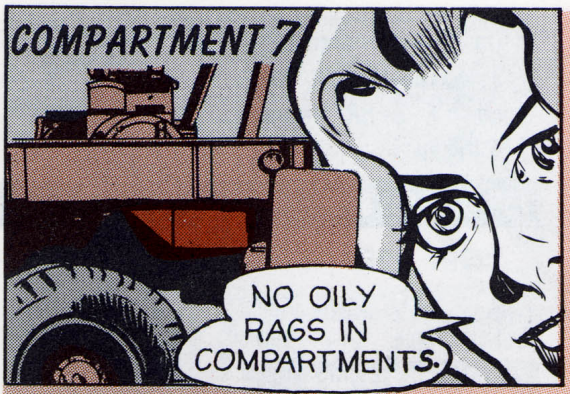
FSN 2540-040-2300

1—BAR, tie boom jack

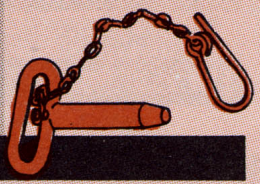


FSN 2540-040-2298

PS MORE



2 — PIN, boom jack, w/ lock pin

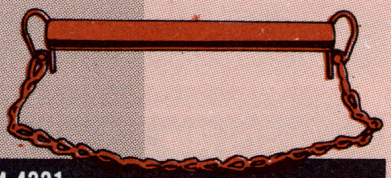


FSN 5315-740-9834

2 — PIN, boom jack, tie bar yoke, w/lock pin

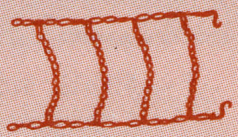
FSN 5315-316-1008

1 — PIN, inner boom jack, w/lock pins



FSN 5315-854-4331

3 — CHAIN, pneumatic tire, truck, sgl, 11.00-20 (for left side of vehicle — when authorized), (3 in comp 6)

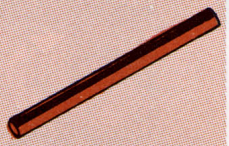


FSN 2540-054-0027

2 — SHACKLE, anchor, rd pin, 7/8-in dia

FSN 2540-318-0326

1 — BAR, cranking, outrigger, 1-in dia, 12 inches long, (duplicate in Compartment 6)



FSN 2540-860-2359

1—WRENCH, auto, adj, 15 inches long

FSN 5120-264-3793

1 — WRENCH, pipe, hv duty, adj, 18 inches long

FSN 5120-277-1461

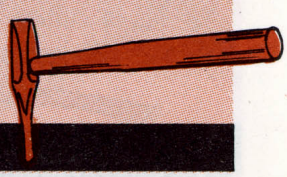
1 — CHISEL, blacksmith's, cold, 1½-in cutting edge, 16-in hdl

FSN 5110-221-1075

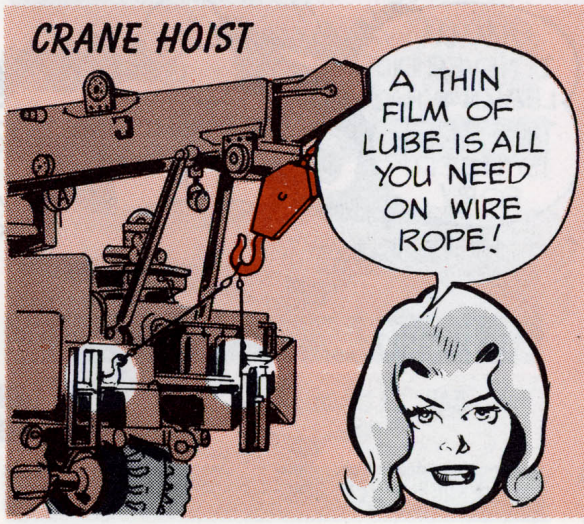
2 — CHISEL, machinist, cold, 1-in cutting edge, 24 inches long

FSN 5120-238-8292

1 — PUNCH, blacksmith's, rd hdl, ¼-in dia cutting edge



FSN 5120-197-9473



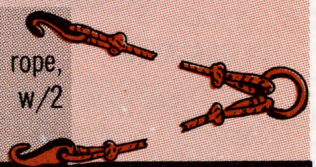
1 — ROPE, wire, ½-in dia, 95 feet 5 inches long

FSN 4010-285-4208

1 — CLEVIS ASSY, wire rope

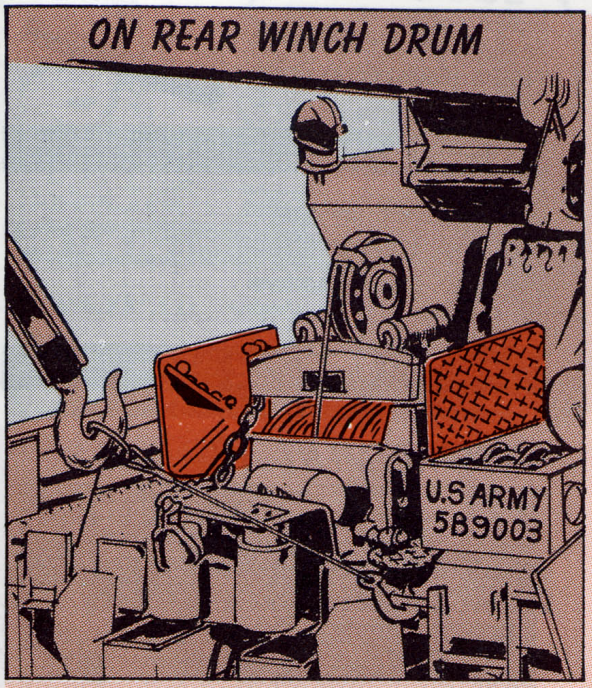
FSN 4030-961-9781

1 — SLING, wire rope, dbl leg, w/ring, w/2 hooks



FSN 2520-040-2297

ON REAR WINCH DRUM



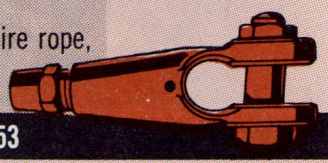
1 — CABLE ASSY, winch, w/clevis and chain

CONSISTING OF:

1 — CHAIN, winch, ¾-in link, 6 feet long, w/ hook

FSN 2540-771-7033

1 — CLEVIS, wire rope, ¾-in dia



FSN 4030-706-5553

1 — ROPE, wire, ¾-in dia, 350 feet long, hemp center

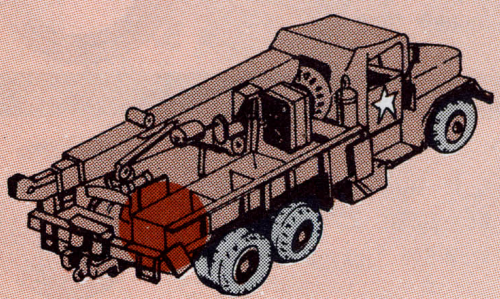
FSN 4010-285-4210

REAR DECK

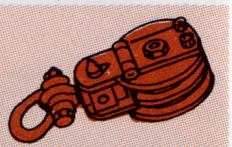
2 — BASE, boom jack, (1 each side of winch)

FSN 2540-040-2299

COMPARTMENT 5



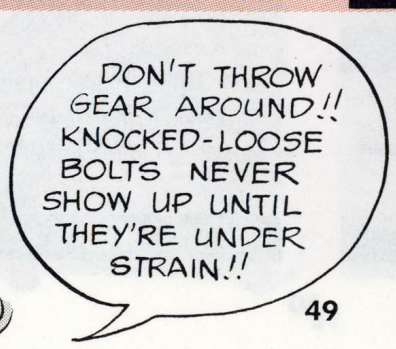
2 — BLOCK, rigging, wire rope, dbl 8-in sheave, w/swv shackle, ⅞-in dia rope, 25-ton cap

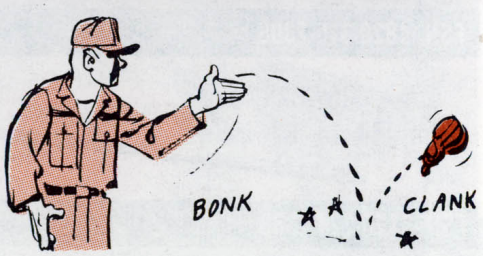


FSN 3940-792-9881

2 — BLOCK, rigging, wire rope, sgl 10-in sheave, w/swv eye and shackle, ¾-in dia rope, 15-ton cap

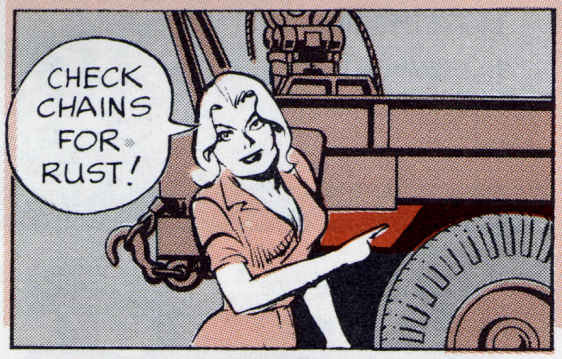
FSN 3940-630-9932



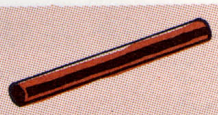


P.S MORE

COMPARTMENT 6

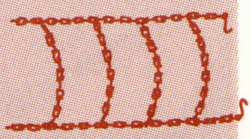


1 — BAR, cranking, outrigger (duplicate in Comp 7)



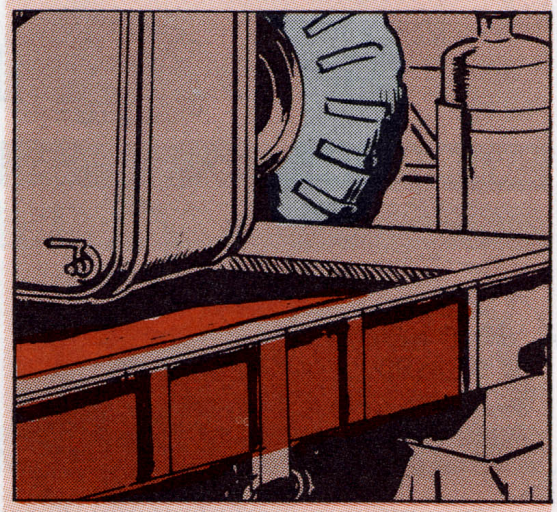
FSN 2540-860-2359

3 — CHAIN, pneumatic tire (for right side of vehicle — when authorized — duplicates in Comp 7)



FSN 2540-054-0027

COMPARTMENT 4



1—BAR, hoisting (whiffletree)

FSN 3940-347-9703

1 — BAR, tow, motor vehicle, V type, light duty

FSN 4910-735-6056

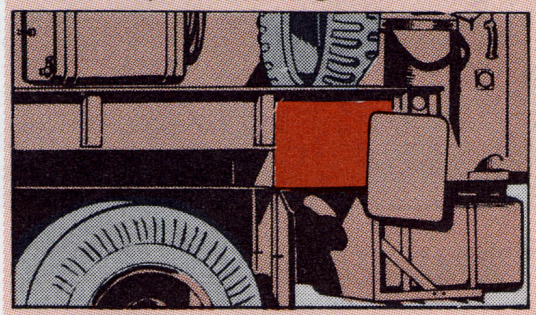
2—CHOCK, field (spade and leg)

FSN 4820-315-2306

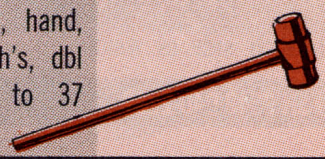
2 — CROWBAR, pinch point, 59 to 62 inches long

FSN 5120-224-1390

COMPARTMENT 3B

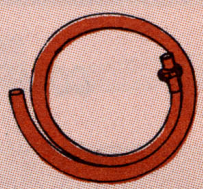


1 — HAMMER, hand, sledge, blacksmith's, dbl face, 20-lb, 35 to 37 inches long



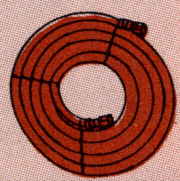
FSN 5120-230-7843

1 — HOSE, tank drain, hyd oil, 1 3/16-in od, 60 inches long



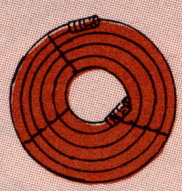
FSN 2590-899-6721

1—HOSE, rubber, braided, green, 25 feet long, w/plugs (oxygen)



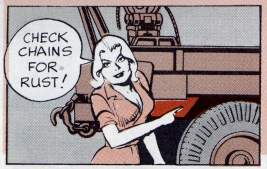
FSN 3433-356-8572

1—HOSE, rubber, braided, red, 25 feet long, w/plugs (acetylene)



FSN 3433-356-8571

COMPARTMENT 6



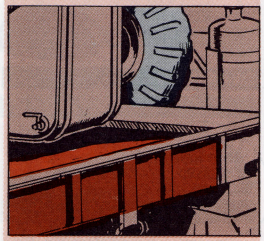
1 — BAR, cranking, outrigger (duplicate in Comp 7)

FSN 2540-860-2359

3 — CHAIN, pneumatic tire (for right side of vehicle — when authorized — duplicates in Comp 7)

FSN 2540-054-0027

COMPARTMENT 4



1—BAR, hoisting (whiffletree)

FSN 3940-347-9703

1 — BAR, tow, motor vehicle, V type, light duty

FSN 4910-735-6056

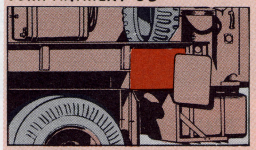
2—CHOCK, field (spade and leg)

FSN 4820-315-2306

2 — CROWBAR, pinch point, 59 to 62 inches long

FSN 5120-224-1390

COMPARTMENT 3B



1 — HAMMER, hand, sledge, blacksmith's, dbl face, 20-lb, 35 to 37 inches long

FSN 5120-230-7843

1 — HOSE, tank drain, hyd oil, 1 3/4-in od, 60 inches long

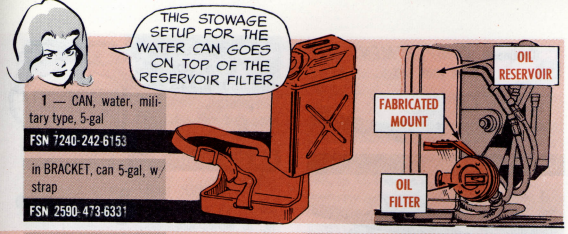
FSN 2590-899-6721

1—HOSE, rubber, braided, green, 25 feet long, w/plugs (oxygen)

FSN 3433-356-8572

1—HOSE, rubber, braided, red, 25 feet long, w/plugs (acetylene)

FSN 3433-356-8571



1 — CAN, water, military type, 5-gal

FSN 7240-242-6153

in BRACKET, can 5-gal, w/strap

FSN 2590-473-6331

1 — JACK, hydraulic, hand, 30-ton cap, w/operating lever

FSN 5120-188-1790

1 — REGULATOR, pressure, compressed gas, acetylene, w/coupling, adapter and outlet

FSN 6680-285-6067

1 — REGULATOR, pressure, compressed gas, oxygen, w/coupling, adapter and outlet

FSN 6680-641-3519

1 — TOOL SET, welder's

FSN 3431-754-0661

CONSISTING OF:

1 — TOOL BOX, mechanic's general, w/tote tray

FSN 5140-357-5483

IN TOOL BOX:

1 — BRUSH, wire, scratch

FSN 7920-291-5815

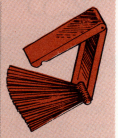
1 — CHISEL, hand, cold, 1/2-in cutting edge, 5 3/4 inches long

FSN 5110-186-7107

1 — CHISEL, hand, cold, 3/4-in cutting edge, 6 1/2 inches long

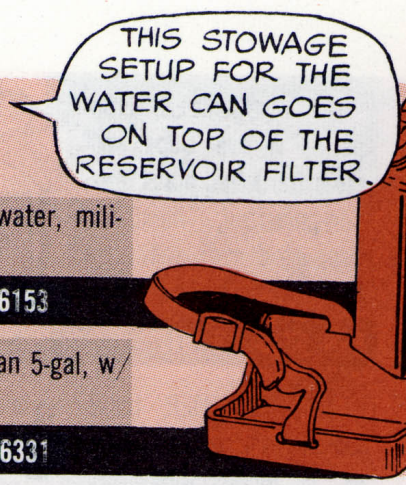
FSN 5110-236-3272

1—CLEANER SET, welding and cutting tips, 21 cleaners, designations A to V, w/carrying case, indexed



FSN 3439-270-6047

MORE

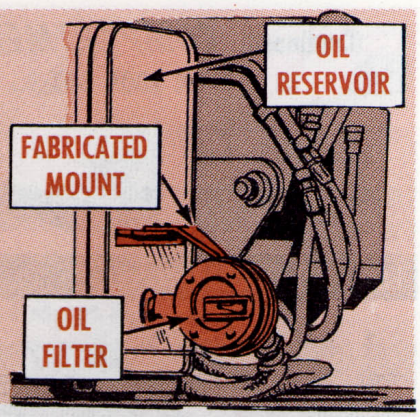


1 — CAN, water, military type, 5-gal

FSN 7240-242-6153

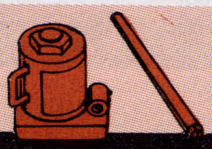
in BRACKET, can 5-gal, w/strap

FSN 2590-473-6331



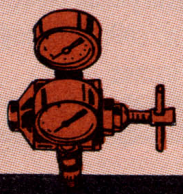
1 — JACK, hydraulic, hand, 30-ton cap, w/operating lever

FSN 5120-188-1790



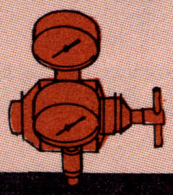
1 — REGULATOR, pressure, compressed gas, acetylene, w/coupling, adapter and outlet

FSN 6680-285-6067



1 — REGULATOR, pressure, compressed gas, oxygen, w/coupling, adapter and outlet

FSN 6680-641-3519

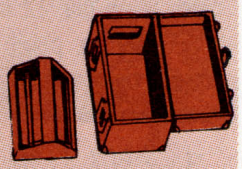


1 — TOOL SET, welder's

FSN 3431-754-0661

CONSISTING OF:

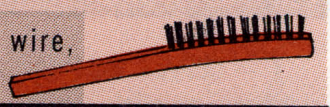
1 — TOOL BOX, mechanic's general, w/tote tray



FSN 5140-357-5483

IN TOOL BOX:

1 — BRUSH, wire, scratch

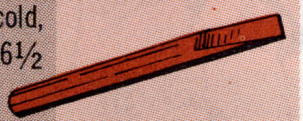


FSN 7920-291-5815

1 — CHISEL, hand, cold, ½-in cutting edge, 5¾ inches long

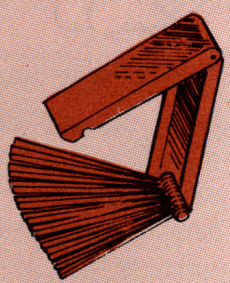
FSN 5110-186-7107

1 — CHISEL, hand, cold, ¾-in cutting edge, 6½ inches long



FSN 5110-236-3272

1—CLEANER SET, welding and cutting tips, 21 cleaners, designations A to V, w/carrying case, indexed



FSN 3439-270-6047

P.S. MORE

(Continued) COMPARTMENT 3B
IN TOOL BOX:

1 — FILE, hand, flat type, 12 inches long heel to point

FSN 5110-234-6539

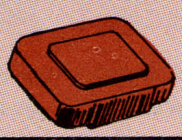
1 — FILE, hand, mill type, 12 inches long heel to point

FSN 5110-242-5386

1 — FILE, hand, round type, ½-in dia, 12 inches long heel to point

FSN 5110-234-6557

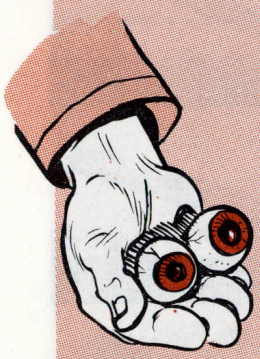
1 — BOX, FLINT TIPS, friction igniter, w/holder, 6 per box



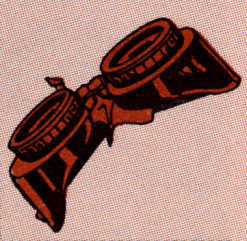
FSN 5120-254-9956

1 — GLOVES, welder's, leather, gauntlet, large size

FSN 8415-268-7859

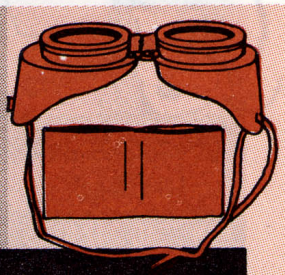


1—GOGGLES, welder's, w/eye cups, w/hardened glass filter lens, w/hardened glass cover lens, headband supported over spectacle type



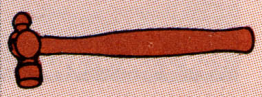
FSN 4240-203-3804

1 — GOGGLES, chipper's, w/eye cups, w/clear hardened glass lens, non-polarized, headband supported over spectacle type



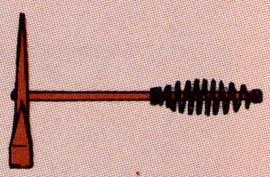
FSN 4240-269-7912

1 — HAMMER, hand, machinist's, ball peen, 2-lb, 16 inches long



FSN 5120-224-4047

1 — HAMMER, hand, welder's, 14-oz, stght peen and punch point, sgl bevel, w/coiled spring hdl, 10 inches long

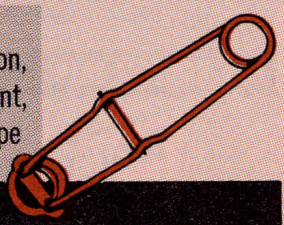


FSN 5120-585-2382

1—HANDLE, file, wood, 1½-in dia, 5½ inches long, large size

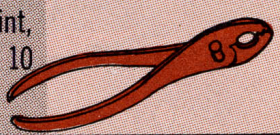
FSN 5110-263-0341

1 — IGNITER, friction, wire frame style, sgl flint, round file, hooded type



FSN 5120-190-5540

1 — PLIERS, slip joint, stght nose, w/cutter, 10 inches long



FSN 5120-223-7398

1 — PUNCH, center, solid, ⅛-in dia tapd pt, 4 inches long

FSN 5120-293-3509

1 — PUNCH, drift, 3/16-in dia pt, 10 inches long

FSN 5120-293-0448

(Continued) **COMPARTMENT 3B**
IN TOOL BOX:

1 — FILE, hand, flat type, 12 inches long heel to point

FSN 5110-234-6539

1 — FILE, hand, mill type, 12 inches long heel to point

FSN 5110-242-5386

1 — FILE, hand, round type, ½-in dia, 12 inches long heel to point

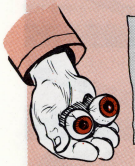
FSN 5110-234-8557

1 — BOX, FLINT TIPS, friction igniter, w/holder, 6 per box

FSN 5120-254-9956

1 — GLOVES, welder's, leather, gauntlet, large size

FSN 8415-268-7859



1—GOGGLES, welder's, w/eye cups, w/hardened glass filter lens, w/hardened glass cover lens, headband supported over spectacle type

FSN 4240-203-3804

1 — GOGGLES, chipper's, w/eye cups, w/clear hardened glass lens, non-polarized, headband supported over spectacle type

FSN 4240-269-7912

1 — HAMMER, hand, machinist's, ball peen, 2-lb, 16 inches long

FSN 5120-224-4047

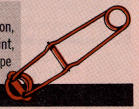
1 — HAMMER, hand, welder's, 14-oz, stght peen and punch point, sgl bevel, w/coiled spring hdl, 10 inches long

FSN 5120-585-2382

1—HANDLE, file, wood, 1½-in dia, 5½ inches long, large size

FSN 5110-263-0341

1 — IGNITER, friction, wire frame style, sgl flint, round file, hooded type



FSN 5120-190-5540

1 — PLIERS, slip joint, stght nose, w/cutter, 10 inches long

FSN 5120-223-7398

1 — PUNCH, center, solid, ⅛-in dia tapd pt, 4 inches long

FSN 5120-293-3509

1 — PUNCH, drift, ¾-in dia pt, 10 inches long

FSN 5120-293-0448

1—RULE, multiple folding, wood or steel, 3-ft extended length, 6 sections, (steel)

FSN 5210-239-0489

or (wood).

FSN 5210-239-3393

1 — SCREWDRIVER, flat tip, metal, w/wood insert hdl, 7/16-in wide tip, 8-in blade, 14½ inches long

FSN 5120-222-8871

1 — SCRIBER, machinist's, dbl pt, screwed, 1 stght and 1 reg bent, removable, 8 to 9 inches long

FSN 5120-596-1543

1 — SQUARE, combination, 12 inches long, sq and miter head, w/scriber and level

FSN 5210-221-2068

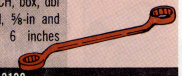
1 — WRENCH, box, dbl offset, dbl hd, ⅜-in and 7/16-in opngs, 4 inches long

FSN 5120-224-3153

1 — WRENCH, box, dbl offset, dbl hd, ½-in and 9/16-in opngs, 4¾ inches long

FSN 5120-224-3154

1 — WRENCH, box, dbl offset, dbl hd, 5/8-in and ¾-in opngs, 6 inches long



FSN 5120-224-3138

1—WRENCH, open end, adj, sgl hd, 8 inches long

FSN 5120-240-5328

1—WRENCH, open end, adj, sgl hd, 12 inches long

FSN 5120-264-3796

1—WRENCH, open end, fixed, dbl hd, ⅜-in and 7/16-in opngs, 4⅛ inches long

FSN 5120-277-2342

1—WRENCH, open end, fixed, dbl hd, ½-in and 9/16-in opngs, 5½ inches long

FSN 5120-187-7124

1 — WRENCH, open end, fixed, dbl hd, 5/8-in and 11/16-in opngs, 7 inches long

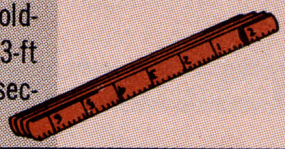
FSN 5120-277-8301

1 — WRENCH, plier, curved jaw style, w/wire cutter, 8½ inches long

FSN 5120-494-1911

MORE

1—RULE, multiple folding, wood or steel, 3-ft extended length, 6 sections, (steel)

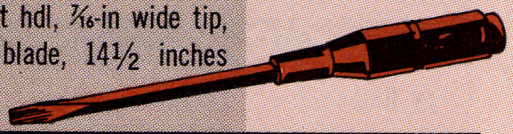


FSN 5210-239-0489

or (wood).

FSN 5210-239-3393

1 — SCREWDRIVER, flat tip, metal, w/wood insert hdl, 7/16-in wide tip, 8-in blade, 14 1/2 inches long

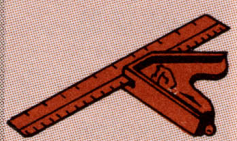


FSN 5120-222-8871

1 — SCRIBER, machinist's, dbl pt, screwed, 1 stght and 1 reg bent, removable, 8 to 9 inches long

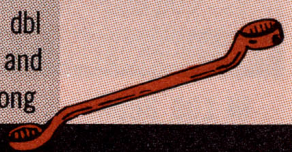
FSN 5120-596-1543

1 — SQUARE, combination, 12 inches long, sq and miter head, w/scriber and level



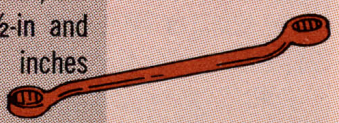
FSN 5210-221-2068

1 — WRENCH, box, dbl offset, dbl hd, 3/8-in and 7/16-in opngs, 4 inches long



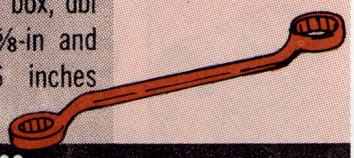
FSN 5120-224-3153

1 — WRENCH, box, dbl offset, dbl hd, 1/2-in and 9/16-in opngs, 4 3/4 inches long



FSN 5120-224-3154

1 — WRENCH, box, dbl offset, dbl hd, 5/8-in and 3/4-in opngs, 6 inches long



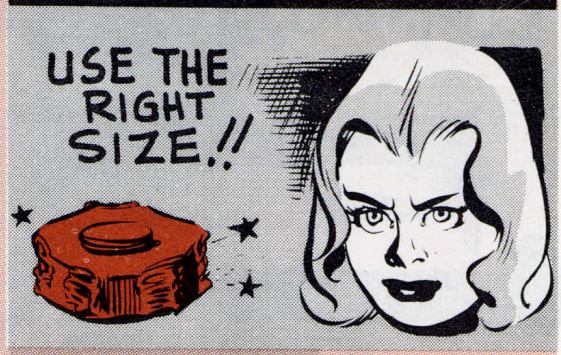
FSN 5120-224-3138

1—WRENCH, open end, adj, sgl hd, 8 inches long

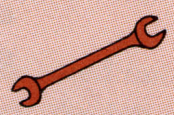
FSN 5120-240-5328

1—WRENCH, open end, adj, sgl hd, 12 inches long

FSN 5120-264-3796

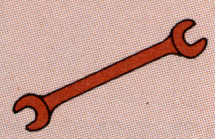


1—WRENCH, open end, fixed, dbl hd, 3/8-in and 7/16-in opngs, 4 1/8 inches long



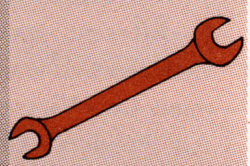
FSN 5120-277-2342

1—WRENCH, open end, fixed, dbl hd, 1/2-in and 9/16-in opngs, 5 1/2 inches long



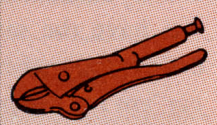
FSN 5120-187-7124

1 — WRENCH, open end, fixed, dbl hd, 5/8-in and 11/16-in opngs, 7 inches long



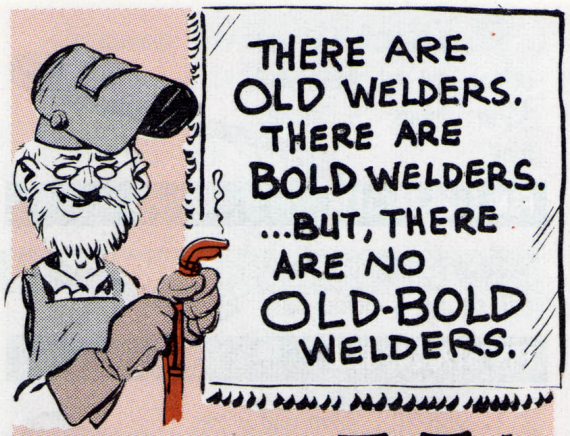
FSN 5120-277-8301

1 — WRENCH, plier, curved jaw style, w/wire cutter, 8 1/2 inches long

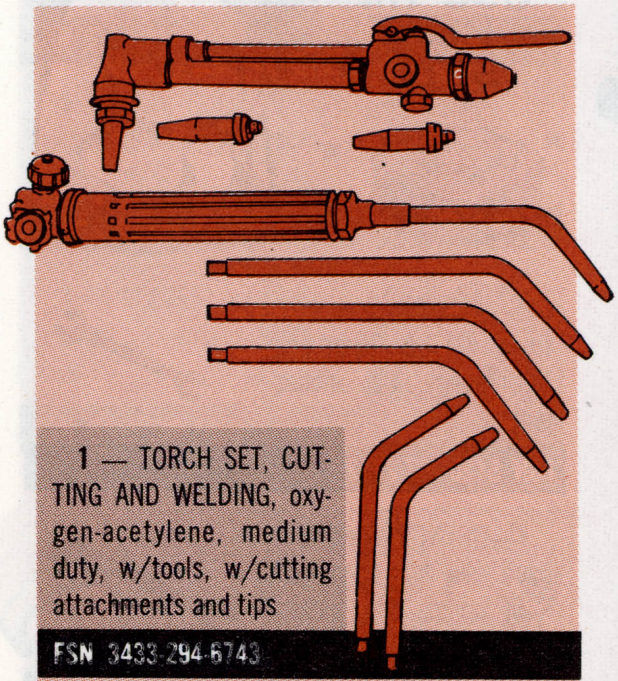


FSN 5120-494-1911

PS MORE



WEAR PROTECTIVE CLOTHING ALWAYS!

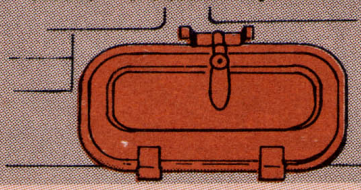


1 — TORCH SET, CUTTING AND WELDING, oxygen-acetylene, medium duty, w/tools, w/cutting attachments and tips

FSN 3433-294-6743

(Your torch set comes from one of 6 different manufacturers — National Cylinder Gas Co., Smith Welding Equipment Co., Victor Equipment Co., Linde Air Products Co., Black Mfg. Co. or Dockson Corp. So yours may not look exactly like the setup shown. All the sets have the same FSN, but when you order replacement items, make sure you get 'em for the particular manufacturer's set you have.)

MAP COMPARTMENT



2 — FLASHLIGHT, electric, hand, 2 cell, w/lamp

FSN 6230-264-8261

4 — BATTERY, dry, 1.5 volt (in flashlights)

FSN 6135-120-1020

1 — BAG, pamphlet, cotton duck

FSN 2540-796-1712

IN BAG:

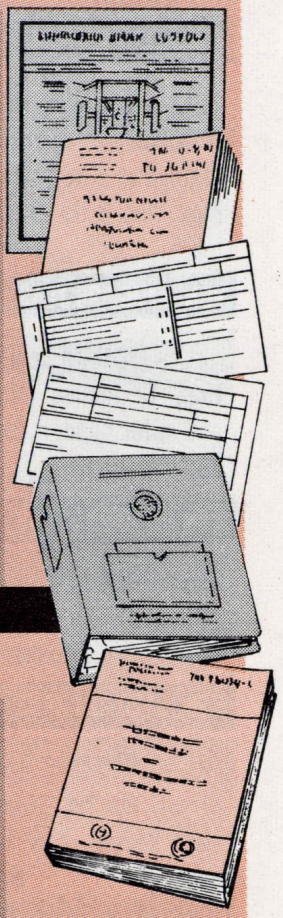
1 — LUBRICATION ORDER, LO 9-2320-211-12.

1 — MANUAL, TECHNICAL, TM 9-2320-211-10 w/ changes as indicated by DA Pam 310-4.

1 — FORM, Accident Report, SF 91.

1 — FORM, Accident Identification, DD Form 518.

1 — LOG BOOK BINDER

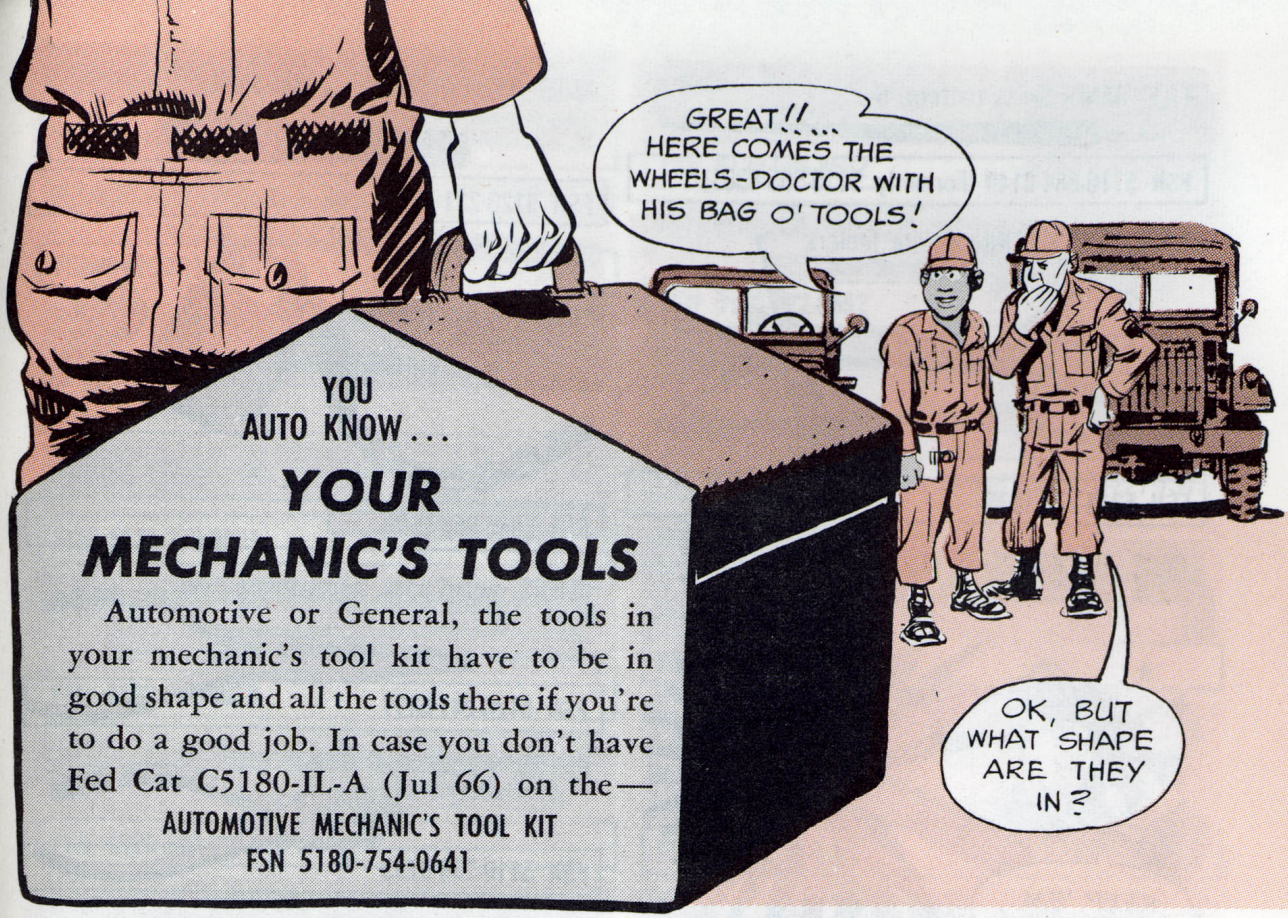


FSN 7510-889-3494

IN LOG BOOK:

1 — MANUAL, TECHNICAL, TM 9-2320-211-ESC/2 (for M543) or TM 9-2320-211-ESC/11 (for M543A2).

FORMS, as required by TM 38-750.



YOU AUTO KNOW...

YOUR MECHANIC'S TOOLS

Automotive or General, the tools in your mechanic's tool kit have to be in good shape and all the tools there if you're to do a good job. In case you don't have Fed Cat C5180-IL-A (Jul 66) on the—

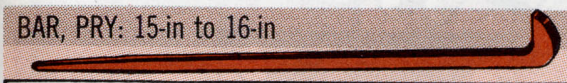
AUTOMOTIVE MECHANIC'S TOOL KIT
FSN 5180-754-0641

here's a list you can use to check to make sure you have all your tools. This is the latest dope on FSN's and nomenclatures. SM 10-4-5180-A13 has been rescinded by DA Cir 310-17 (10 Aug 66).

Remember, if the tool you have doesn't look exactly like the one listed here, it's due to different manufacturers making the tools. One should do the job as well as the other.

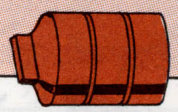
You get only one tool unless noted.

BAR, PRY: 15-in to 16-in



FSN 5120-224-1389

BIT, SCREWDRIVER: ½-in drive, 47/64-in tip



FSN 5120-223-6986

BIT, SCREWDRIVER: ½-in drive, 15/16-in tip

FSN 5120-277-3600

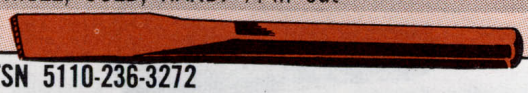
BRUSH, PAINT: oval, 1¼-in

FSN 8020-297-6657

CHISEL, COLD, HAND: ½-in cut

FSN 5110-186-7107

CHISEL, COLD, HAND: ¾-in cut



FSN 5110-236-3272

FILE, HAND: American pattern, flat style, 10-in

FSN 5110-249-2850

FILE, HAND: American pattern, round style, 8-in

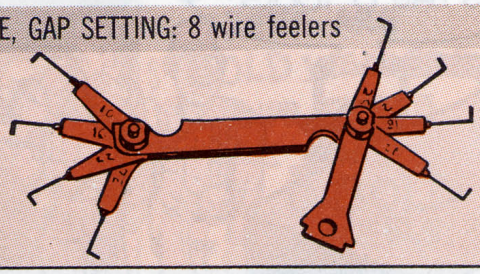
FSN 5110-234-6551

PS MORE

FILE, HAND: Swiss pattern, 6-in

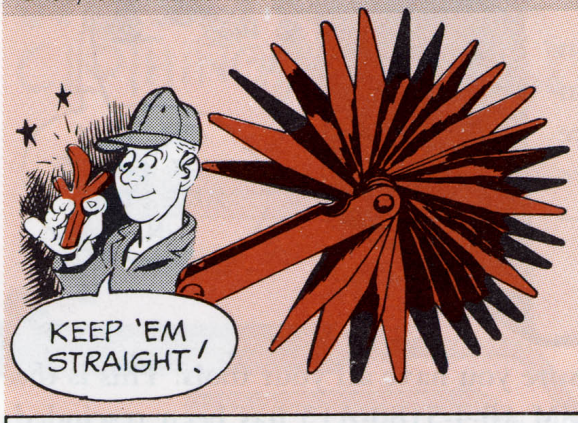
FSN 5110-884-0140 (Formerly 5110-595-8301)

GAGE, GAP SETTING: 8 wire feelers



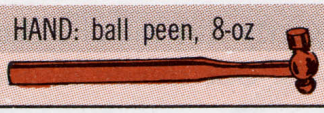
FSN 5210-273-1935

GAGE, THICKNESS: 26 blades



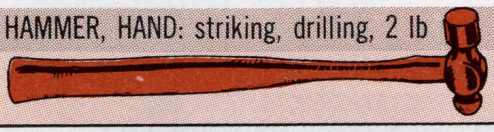
FSN 5210-221-1999

HAMMER, HAND: ball peen, 8-oz



FSN 5120-242-3913

HAMMER, HAND: striking, drilling, 2 lb

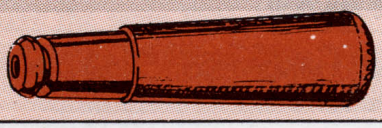


FSN 5120-224-4047

HANDLE, FILE, WOOD: 4½-in

FSN 5110-263-0349

HANDLE, FILE, WOOD: 5½-in (2 ea)

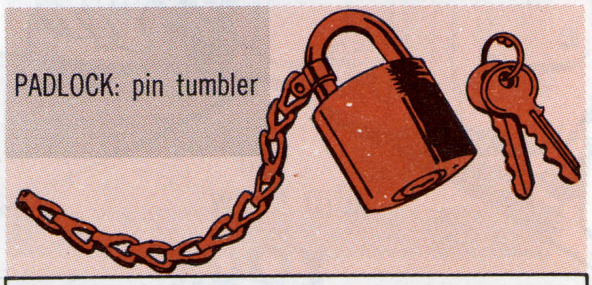


FSN 5110-263-0341

KNIFE, PUTTY: flexible, 1¼-in blade

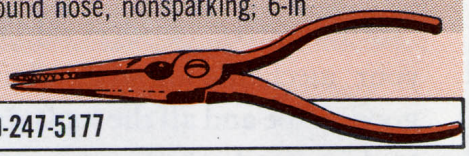
FSN 5120-221-1536

PADLOCK: pin tumbler



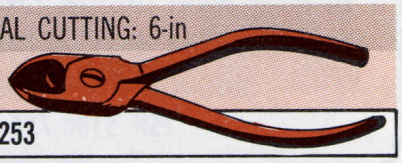
FSN 5340-682-1508

PLIERS: round nose, nonsparking, 6-in



FSN 5120-247-5177

PLIERS, DIAGONAL CUTTING: 6-in



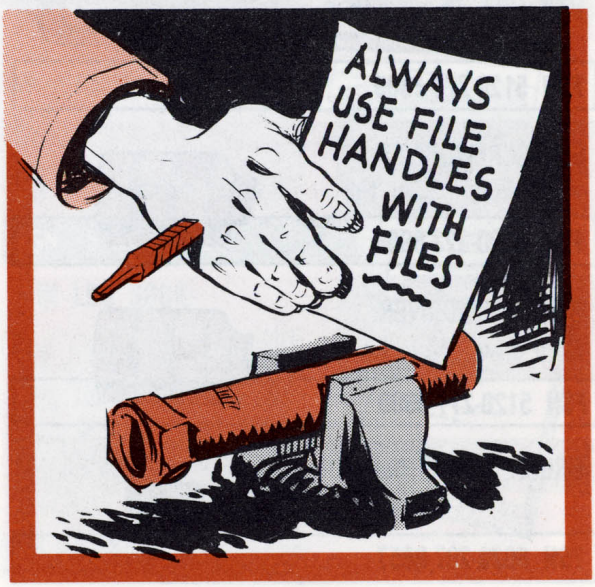
FSN 5110-239-8253

PLIERS, SLIP JOINT: 7 11/16-in

FSN 5120-537-3375

PLIERS, SLIP JOINT: straight nose, 8-in lg

FSN 5120-223-7397



PUNCH, CENTER, SOLID: 5/32-in point

FSN 5120-293-3509

PUNCH, ALIGNING: 3/16-in point

FSN 5120-293-0448

PUNCH, DRIVE PIN: str type, 1/4-in point

FSN 5120-240-6083

PUNCH, DRIVE PIN: str type, 3/8-in point

FSN 5120-273-0001

PUNCH, DRIVE PIN: str type, 3/4-in point

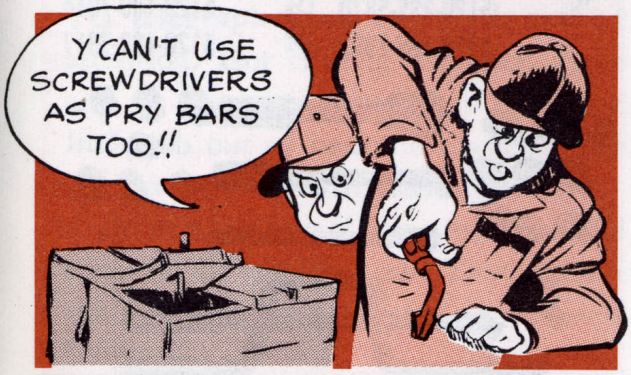
FSN 5120-239-0038

PUNCH, DRIVE PIN: tapered type, 1/8-in point

FSN 5120-242-3433

RULE, STEEL, MACHINIST'S: 6-in

FSN 5210-234-5223



SCREWDRIVER, CROSS TIP: tip sz No. 1, blade 3-in

FSN 5120-240-8716

SCREWDRIVER, CROSS TIP: tip sz No. 2, blade 4-in

FSN 5120-234-8913

SCREWDRIVER, CROSS TIP: tip sz No. 3, blade 6-in

FSN 5120-234-8912

SCREWDRIVER, FLAT TIP: flared tip, blade 1 1/2-in

FSN 5120-596-8502

SCREWDRIVER, FLAT TIP: flared tip, blade 4-in

FSN 5120-222-8852

SCREWDRIVER, FLAT TIP: flared tip, blade 8-in

FSN 5120-278-1280 (Replacement for 5120-227-7349)

SCREWDRIVER, OFFSET: 3/8-in tip

FSN 5120-240-5232

SHEARS, METAL CUTTING, HAND: duckbill, 7-in

FSN 5110-221-1085

SOCKET, SOCKET WRENCH: 1/2-in sq-drive, 13/16-in wrench opening

FSN 5120-243-7345

TOOL BOX, PORTABLE: steel, 21-in

FSN 5140-498-8772

WRENCH, BOX: double offset, wrench openings 3/8-in and 7/16-in

FSN 5120-224-3153

WRENCH, BOX: double offset, wrench openings 1/2-in and 9/16-in

FSN 5120-224-3154

WRENCH, BOX: double offset, wrench openings 5/8-in and 3/4-in

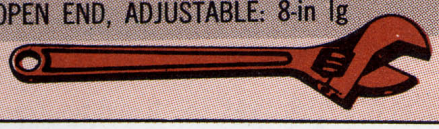
FSN 5120-224-3138

WRENCH, BOX: halfmoon type, 9/16 and 5/8-in openings

FSN 5120-222-1596 (Replacement for 5120-313-9495)

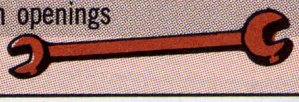
P.S MORE

WRENCH, OPEN END, ADJUSTABLE: 8-in lg



FSN 5120-240-5328

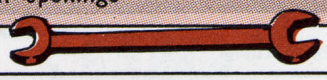
WRENCH, OPEN END, FIXED: 15 degree angle of head, 3/8 and 7/16 inch openings



FSN 5120-277-2342

WRENCH, OPEN END, FIXED: 15 degree angle of head, 1/2 and 9/16-inch openings

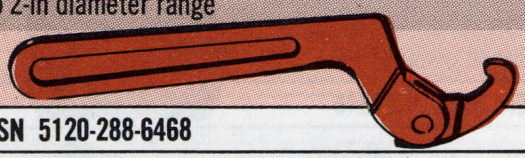
FSN 5120-187-7124



WRENCH, OPEN END, FIXED: 15 degree angle of head, 5/8 and 11/16 inch openings

FSN 5120-277-8301

WRENCH, SPANNER: adjustable hook type, 3/4-in to 2-in diameter range



FSN 5120-288-6468

WRENCH SET, COMBINATION BOX AND OPEN END:

FSN 5120-293-0535 (Replaces FSN 5120-357-8411)

CONSISTING OF: (W/ROLL)

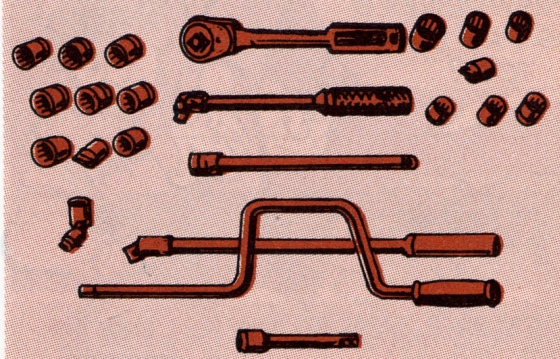
Wrench Openings, In.	Box Wrench Opening Shape	Nom O/A Lg, In.	FSN
5/16	Hex or 12 Point	3 1/4	5120-228-9503
3/8	Hex or 12 Point	4 3/16	5120-228-9504
7/16	Hex or 12 Point	5	5120-228-9505
1/2	12 Point	5 1/4	5120-228-9506
9/16	12 Point	5 3/4	5120-228-9507
5/8	12 Point	6 1/8	5120-228-9508
11/16	12 Point	7	5120-228-9509
3/4	12 Point	8	5120-228-9510
13/16	12 Point	10 1/4	5120-228-9511
7/8	12 Point	10 1/4	5120-228-9512
15/16	12 Point	12	5120-228-9513
1	12 Point	12 1/2	5120-228-9514
1 1/16	12 Point	14	5120-228-9515
1 1/8	12 Point	14 1/2	5120-228-9516
1 1/4	12 Point	16	5120-228-9517

WRENCH SET, SOCKET: square drive, 1/2-in drive size, 12 point sockets, w/case

FSN 5120-081-2307 (Replaces FSN 5120-289-8665).

CONSISTING OF:

Size, In.	FSN	Size, In.	FSN
3/8	5120-237-0982	25/32	5120-189-7915
7/16	5120-189-7924	13/16	5120-189-7933
1/2	5120-237-0984	7/8	5120-189-7934
9/16	5120-189-7932	15/16	5120-189-7935
19/32	5120-239-0019	1	5120-189-7927
5/8	5120-189-7946	1 1/16	5120-189-7913
11/16	5120-235-5870	1 1/8	5120-189-7914
3/4	5120-189-7985	1 1/4	5120-189-7917



HANDLE AND/OR ATTACHMENT DATA

Item Name	Nom Lg, In.	FSN
Extension, Socket Wrench	2	5120-243-1697
Extension, Socket Wrench	5	5120-243-7326
Extension, Socket Wrench	10	5120-227-8074
Handle, Socket Wrench	9	5120-230-6385
Handle, Socket Wrench	11	5120-241-3142
Handle, Socket Wrench	18	5120-236-7590
Handle, Socket Wrench	18	5120-230-6364

COMMUNICATIONS

KEEP YOUR COOL, CAZ!

Carrier Equipment can lose its cool quicker'n a cat seein' a dog, especially when the weather is super-warm . . . like in Charlie country.

But, one good way to keep overheated carrier equipment operating is to pull out the component drawers part way. Let air circulate around them, and operate away!

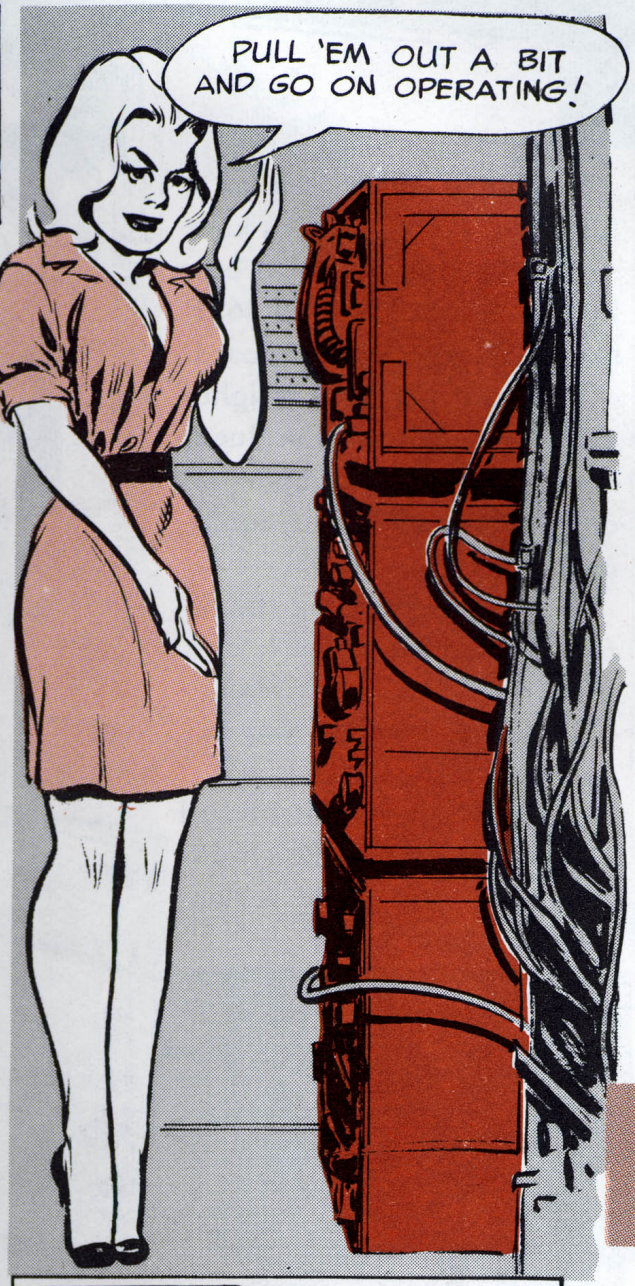
However, one component, the TH-5/TG telegraph terminal, needs special attention. Hot climate, enclosed space and its own generated heat puts that little job out of operation when other components are still clicking away.

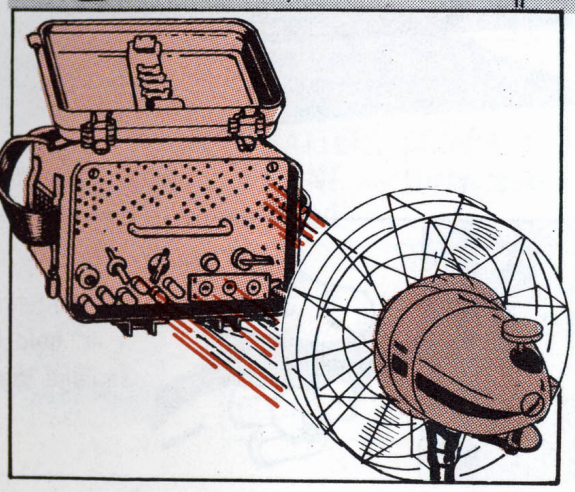
Point a fan at it if you can, and make sure the air hits the unit. That's about the handiest way to stay in business longest.

If you don't have a fan, you might try a relay. Like, shut down for a minute, remove the hot TH-5 and replace it with a cool one.

The wheels know about the TH-5's over-heating problem, so they're working on modified circuitry to help out. Also, an MWO is being worked up which will provide forced air cooling.

Like, don't lose your cool, pal. The iceman's coming.





BE YOUR OWN INSPECTOR . . .

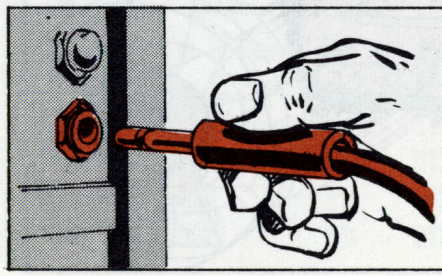
COVER SB-86/P

A cup of coffee, tea or a luscious la femme on your knee — that's your problem . . . but, keep 'em off your SB-86/P manual telephone switchboard.

Spilled drinks and weighty dames can damage the fluent flow of fancy talk and put you on the outs with your equipment.

So, instead of using the SB for a goodie bar or stool, treat it right and the switchboard will talk to you the way it's supposed to.

Here're a few switchboard clues to tell you trouble's brewing, with the more serious points in **bold type:**



Note to Remember: When pulling the cord from a jack, or putting it in, hold it by the plug. Pulling or pushing by the cord will damage the cord, toute de suite.

BE YOUR OWN INSPECTOR . . .

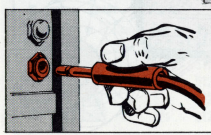
COVER SB-86/P WITH TLC (TENDER LOVING CARE)

A cup of coffee, tea or a luscious la femme on your knee — that's your problem . . . but, keep 'em off your SB-86/P manual telephone switchboard.

Spilled drinks and weighty dames can damage the fluent flow of fancy talk and put you on the outs with your equipment.

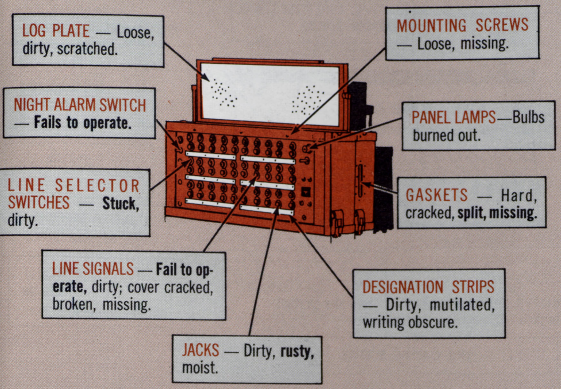
So, instead of using the SB for a goodie bar or stool, treat it right and the switchboard will talk to you the way it's supposed to.

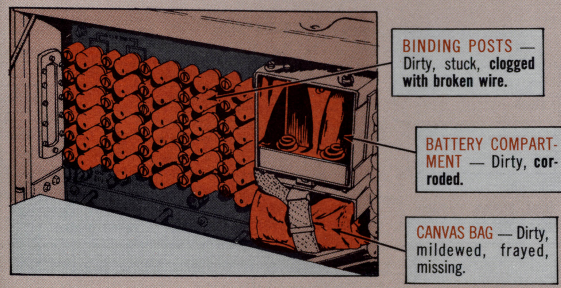
Here're a few switchboard clues to tell you trouble's brewing, with the more serious points in **bold type:**



Note to Remember: When pulling the cord from a jack, or putting it in, hold it by the plug. Pulling or pushing by the cord will damage the cord, toute de suite.

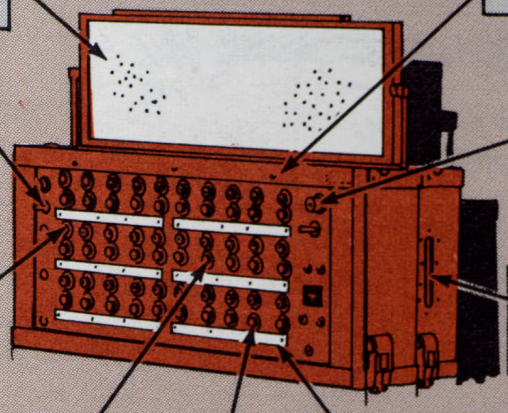
TA-207/P SWITCHBOARD SIGNAL ASSEMBLY
(Field Jack Section)





P.S. MORE

TA-207/P SWITCHBOARD SIGNAL ASSEMBLY
(Field Jack Section)



LOG PLATE — Loose, dirty, scratched.

MOUNTING SCREWS — Loose, missing.

NIGHT ALARM SWITCH — **Fails to operate.**

PANEL LAMPS—Bulbs burned out.

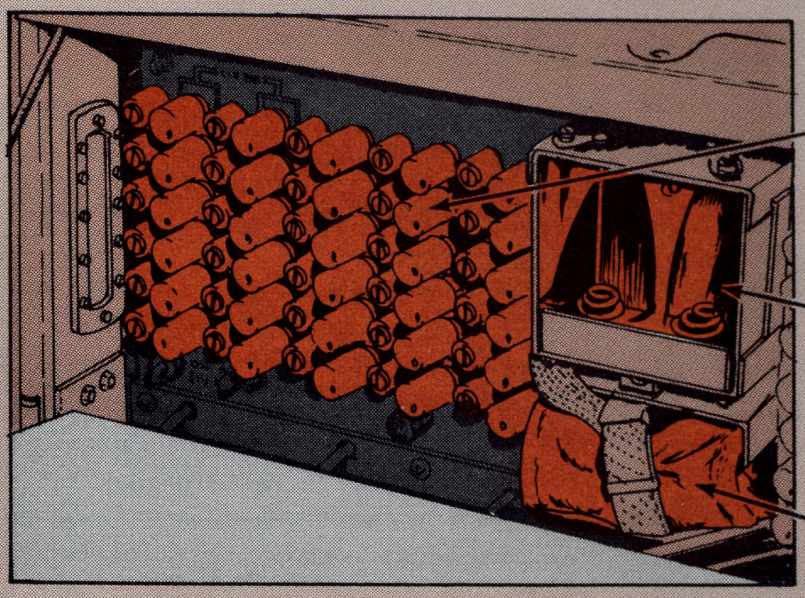
LINE SELECTOR SWITCHES — **Stuck,** dirty.

GASKETS — Hard, cracked, **split, missing.**

LINE SIGNALS — **Fail to operate,** dirty; cover cracked, broken, missing.

DESIGNATION STRIPS — Dirty, mutilated, writing obscure.

JACKS — Dirty, **rusty,** moist.



BINDING POSTS — Dirty, stuck, **clogged with broken wire.**

BATTERY COMPARTMENT — Dirty, **corroded.**

CANVAS BAG — Dirty, mildewed, frayed, missing.

P.S. MORE

SB-248/P SWITCHBOARD SECTION
(Keyshelf Section)

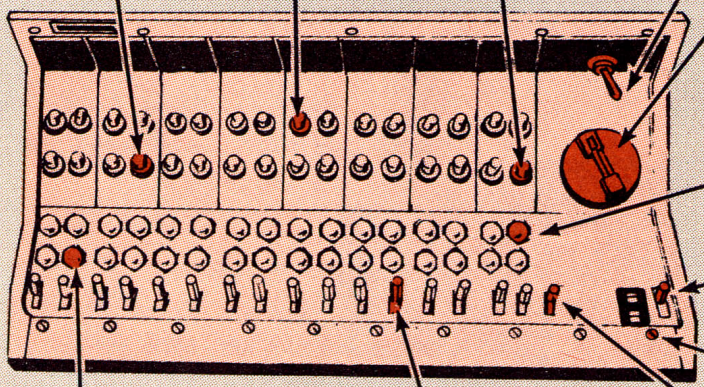
ANSWER CORD — **Cut,** frayed, **spliced.**

CALL CORD — **Cut,** frayed, **spliced.**

PLUGS — Dirty, **corroded,** bent; rubber split, hard, **missing;** cord frayed, **wire exposed, broken.**

TALK BATTERY SWITCH — Loose; **doesn't send side-tone to operator's headset.**

G-42( )/PT HAND GENERATOR — Handle broken, dirty, binding; **doesn't generate.**



ANSWER SUPERVISORY SIGNALS — **Fail to operate,** dirty; cover cracked, broken.

CONF SUPV-TRK SIG SWITCH — Bent.

MOUNTING SCREWS — Loose, missing.

CALL SUPERVISORY SIGNALS — **Fail to operate,** dirty; cover cracked, broken.

CORD CIRCUIT SWITCHES — Bent, **fails to make contact.**

RINGING CIRCUIT SWITCH — **Fails to make contact.**

GASKET — Hard, cracked, **missing.**

OUTER COVER ASSEMBLY

GASKET — Cracked, hard, **missing.**

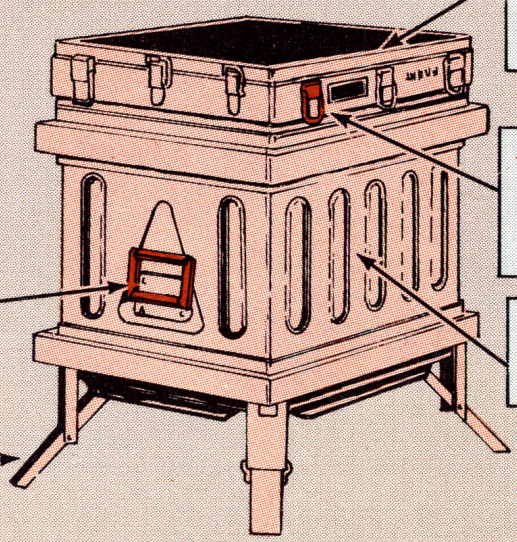
RELIEF VALVE — Dirty, **stuck.**

CAM LEVER — Broken, bent.

TRUNK-TYPE LATCHES — Bent, broken, missing.

CARRYING HANDLES — Bent, broken, missing; spring not tight.

CASE — Dirty, corroded, dented.



MOUNTING LEGS — Bent, broken, missing.

PP-990/G POWER SUPPLY

PANEL COVER — Bent; gasket hard, cracked; hinge broken.

RINGING SUPPLY INDICATOR LAMP — **Doesn't work.**

INT-EXT BATTERY SWITCH — **Doesn't work.**

RINGING SUPPLY FUSE — **Missing, blown,** broken.

BATTERY CHECK SWITCH — **Doesn't operate.**

VOLT BATTERY SUPPLY FUSE — **Missing, blown.** broken.

CARRYING HANDLES — Missing, bent, broken.

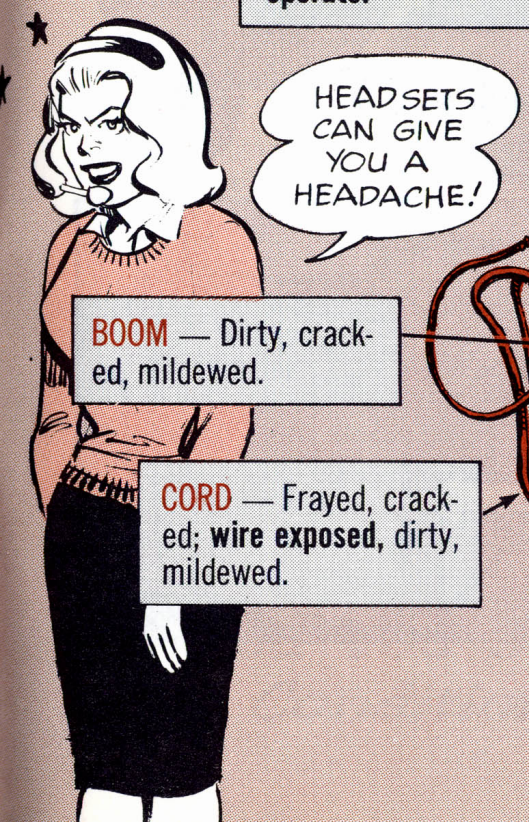
TRUNK-TYPE LATCHES — Bent, broken, missing.

VOLTMETER — **Doesn't work;** window cracked, **broken,** dirty.

BATTERY COMPARTMENT — Dirty, **corroded; contacts broken.**

INTERNAL SWITCHBOARD BATTERY SWITCH — **Doesn't operate.**

POWER CORDS — **Cut,** frayed, **spliced.**



H-91 ( )/U HEADSET-MICROPHONE

HEADBAND — Bent, dirty, cracked, mildewed.

BOOM — Dirty, cracked, mildewed.

CORD — Frayed, cracked; **wire exposed,** dirty, mildewed.

Pubs that'll give you a hand in caring for your SB are: TM 11-2134 (Sep 55) with Changes 1 and 4; TM 11-5805-304-20P (Jul 63); TM 11-5805-257-12P (Oct 61) for G-42 hand generator; TM 11-5965-206-15P (Jan 63) for H-91 headset-microphone.

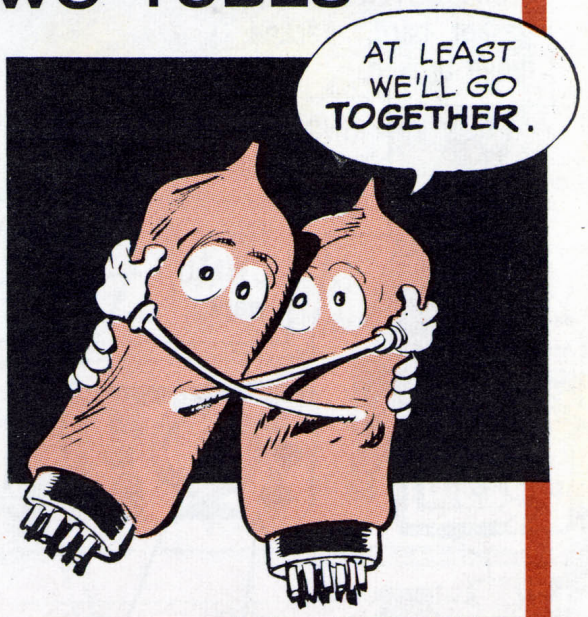
PS END

TIME FOR TWO TUBES

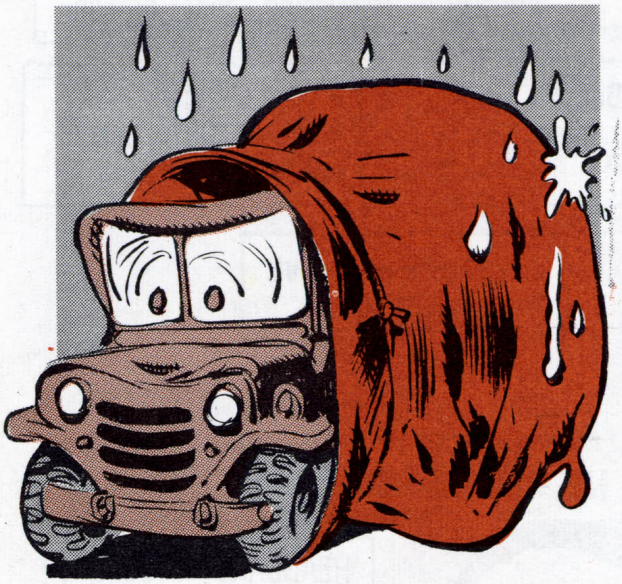
Fixin' to replace a burned out sweep driver tube in your AN/MPQ-4A radar set's IP-375 azimuth and range indicator?

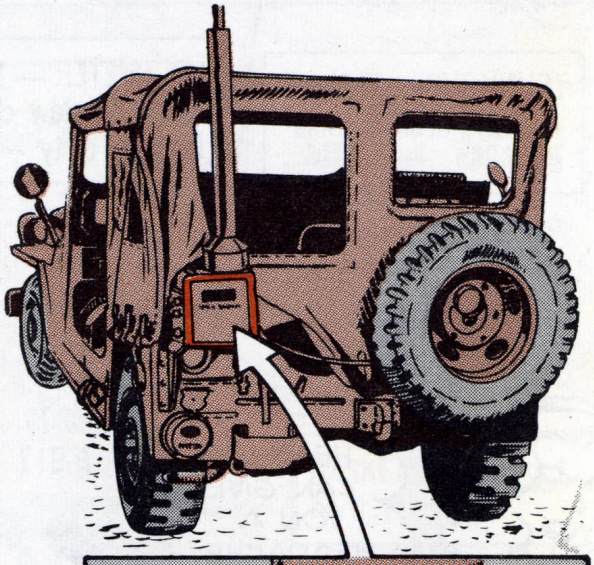
Be generous, George, and change both of 'em while you're at it.

That's right, because if it's the V4503 electron tube that has gone kaput, its V4504 twin will carry the load for a while . . . or vice versa. And, you can bet your azimuth sweep the surviving tube's life will be shortened by this power overload.



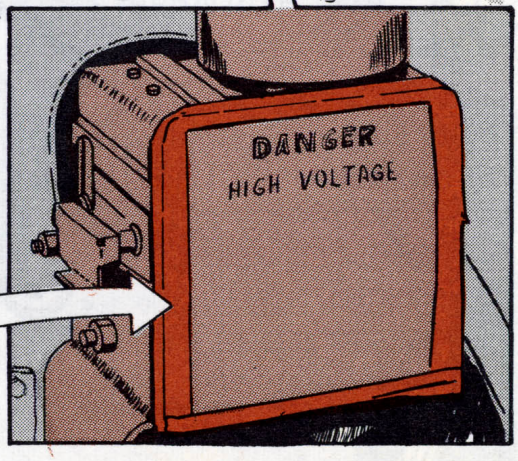
WARD OFF WATER

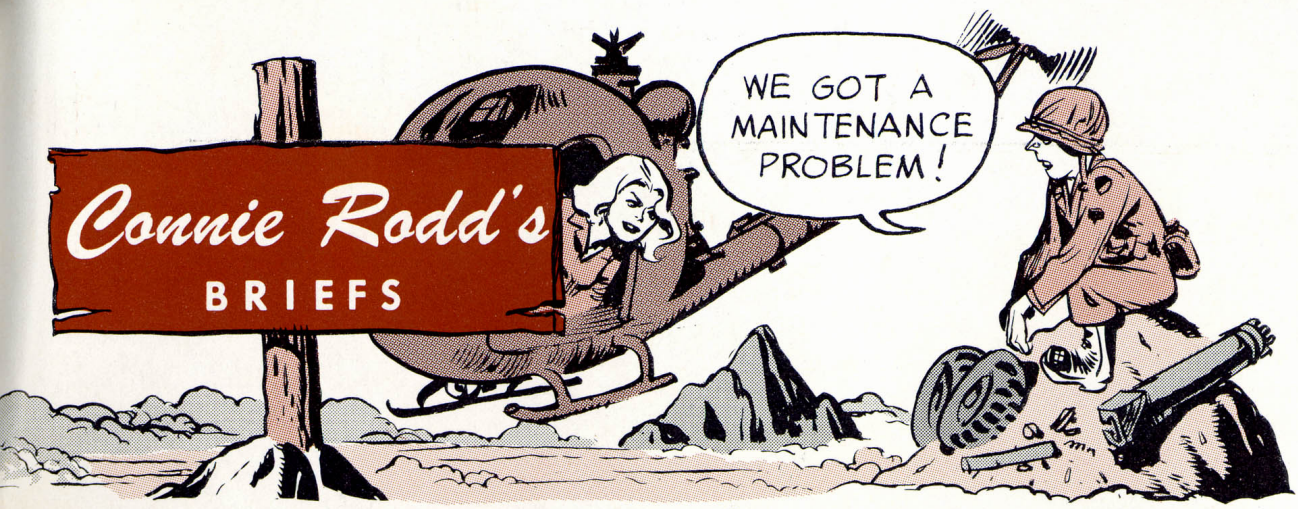




When a moisture leak gets to the AN/MRC-95 radio set's 690D-1 antenna loading coil, it'll short out the antenna. Best invite to moisture is a hard, cracked or broken access cover gasket.

Just ring the rim of the coil case and cover with a piece of 1-in green tape (FSN 8135-269-8088). This'll help keep moisture out.





Winterize With Alcohol

In freezing temperatures winterize your multifuel, diesel and gasoline fuel systems the same. That is, add ½ pint of Grade III, Spec O-E-760B denatured alcohol (FSN 6810-543-7415 brings a gallon) to every 10 gallons of fuel. It's now OK to use alcohol in tactical vehicle's multifuel and diesel fuel system too. USATAC message 1-11635 (18 Jan 67) to all major Commands and Armies gives the go-ahead . . . plus other precautionary measures.

Built-In Arrestor

With the turbo-supercharger that's used on some of your tactical truck engines, you've got a built-in spark arrestor feature. So if your truck has an LDS-427-2 (2½-ton truck), an ENDT 673, LDS-465-1 or LDS-465-1A engine (5-ton truck) you'll never have a need for a spark arrestor muffler.

Covers to Sharpe

Immediately — like right now — ship back those specially-made plastic-coated fiberglass aircraft shipping covers to Sharpe Army Depot as fast as you take them off. They're in short supply and have to be used over and over again.

Easy on "Night-Eyes"

You men on M48A3 and M60 tanks and M728 CEV, take heed. Watch your feet as you climb in or out of those tanks. A lot of image tubes in the M32, M32C and M36 infrared periscopes are being busted by big brogans. Also, anytime you've got that periscope out of the tank, handle and lay it down gently. Use the reusable metal container to ship back any scope going for repair.

Xenon Searchlight Goof

Somebody crossed up a couple of wires in a batch of Model M-9910B xenon searchlights (Serial Nos. 3004 thru 4239). This causes light burnout quicker than a flicker. Get your xenon light in to DS for a fast fix.

Don't Run on PE!

Some diesel and multifuel engines run with PE- type oil in the crankcase are suspected of failing early, so here's the word: Before placing equipment in use, replace the PE-1, -2, or -3 preservative oil with the right grade of OE. Don't wait till the first oil change, like your LO's usually say.

This does NOT apply to spark plug equipped engines, which run fine on PE oil for break-in purposes.

Would You Stake Your Life *right now* on the Condition of Your Equipment?

When an item needs repair, turn it over to your support unit. . . . Don't hang on to it. This will only delay getting a new item back for your use; this applies to all items . . . repair parts, assemblies, major items.